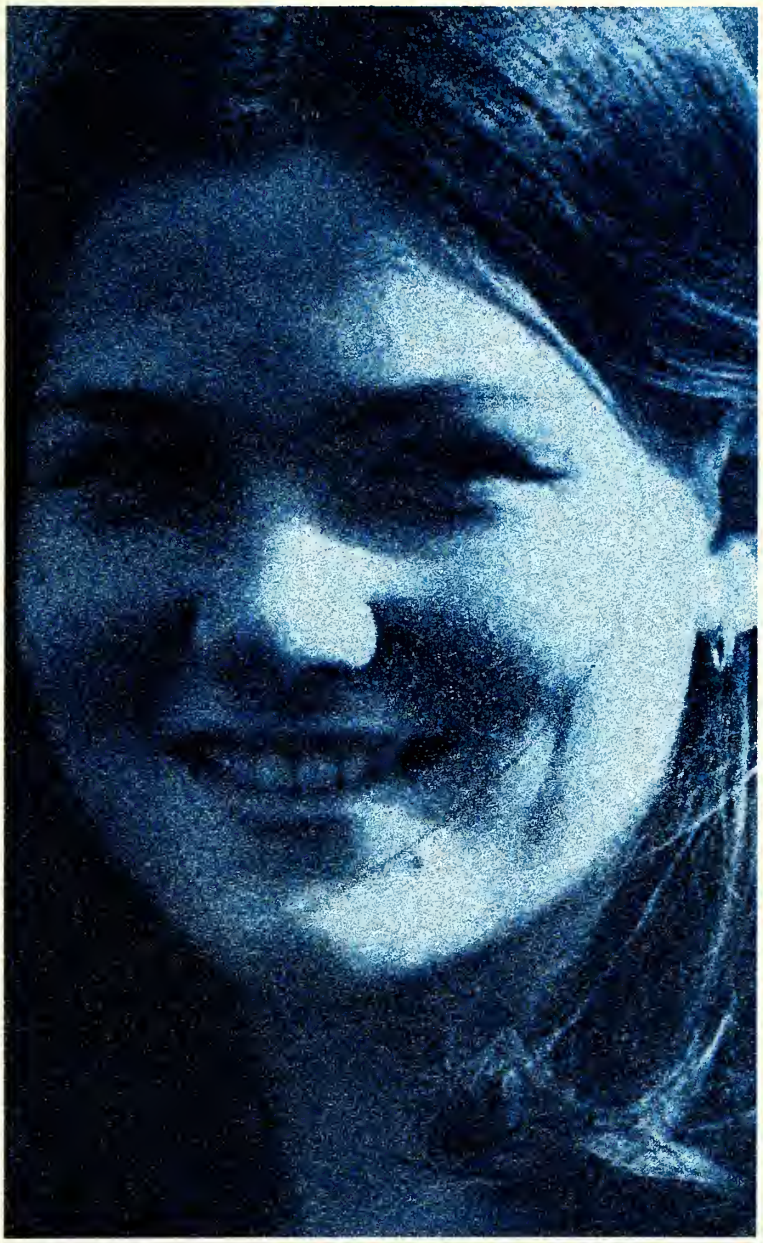
1980 · 1981

MANSFIELD STATE



UNDERGRADUATE

BULLETIN

ACADEMIC CALENDAR — 1980-81

SUMMER SESSION 1980

Registration, Classes begin	June 9
Last day of classes, Final exams	June 27
Alumni Weekend	June 27-29
Registration, Classes begin	July 1
No Classes	July 4
Last day of classes, Final exam	August 8

FALL SEMESTER 1980

Faculty Orientation	August 29
Registration	September 2
Classes begin	September 3
Last day to add classes or choose pass/fail option	September 17
Pre-Registration for spring semester	October 22-November 7
Mid-semester grades due	October 24
Last day to drop classes	November 5
Thanksgiving break begins at 8:00 A.M. on	November 26
Classes resume at 8:00 A.M. on	December 1
Special class schedule, Final exams	December 15-18
Semester ends at 8:00 A.M. on	December 19
Semester grades due	December 19
Academic Standards Review Board	January 20, 21

SPRING SEMESTER 1981

Faculty In-Service Day	January 23
Registration	January 26
Classes begin	January 27
Last day to add classes or choose pass/fail option	February 11
Pre-Registration for fall semester	March 10-25
Mid-semester grades due	March 13
Spring break I begins at 8:00 A.M. on	March 14
Classes resume at 8:00 A.M. on	March 23
Last day to drop classes	March 31
Spring break II begins at 8:00 A.M. on	April 16
Classes resume at 8:00 A.M. on	April 21
Special class schedule, Final exams	May 16-20
Semester ends at 8:00 A.M. on	May 21
Semester grades due	May 21
Commencement	May 23
Academic Standards Review Board	June 10, 11

THE UNDERGRADUATE BULLETIN 1980-1981

Mansfield State College
Mansfield, Pennsylvania 16933

Mansfield State College is committed to assuring equal opportunity to all persons regardless of race, sex, handicap, or other legally protected classification. This policy is placed in this document in accordance with state and federal laws including Title IX of the Education Amendments of 1972 and Section 504 of the Rehabilitation Act of 1973. Please direct equal opportunity inquiries to the Affirmative Action Office, 117 Alumni Hall.

Announcements in this catalog concerning regulations, fees, curricula, or other matters are subject to change without notice.

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DEPARTMENT OF EDUCATION
COMMONWEALTH OF PENNSYLVANIA

Robert G. Scanlon — Secretary of Education
Clayton Sommers — Deputy Secretary and Commissioner for Higher Education

COUNCIL OF HIGHER EDUCATION
COMMONWEALTH OF PENNSYLVANIA

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Keith Doms — Philadelphia, Pennsylvania
Herbert Lauterbach — New Cumberland, Pennsylvania
Fern E. Polaski — Philadelphia, Pennsylvania
William H. Rea — Stahlstown, Pennsylvania

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COMMONWEALTH OF PENNSYLVANIA

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GROSS, Rebecca F.
Lock Haven, Pennsylvania
HAYS, Jo
State College, Pennsylvania
MARSH, Roberta J.
Stroudsburg, Pennsylvania
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Williamsport, Pennsylvania
COGHLAN, Patricia M.
Beaver Falls, Pennsylvania
REDDING, Frederick A.
Shippensburg, Pennsylvania
ROBERTS, Ralph J.
Bala Cynwyd, Pennsylvania
SCHERER, Bernard F.
Greensburg, Pennsylvania
SCHIFFRIN, Beverly
Gladwyne, Pennsylvania
SEYLER, Harry E.
York, Pennsylvania
VELTRI, John B.
Pittsburgh, Pennsylvania
YALE, Stephen L.
Philadelphia, Pennsylvania

BOARD OF TRUSTEES
MANSFIELD STATE COLLEGE

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Media, Pennsylvania
MICHANOWICZ, Andrew, Vice Chairman
Pittsburgh, Pennsylvania
PHINNEY, Thomas
Blossburg, Pennsylvania
RIGAS, John, Secretary
Coudersport, Pennsylvania
STRICKLAND, H.B.
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VAN NOY, F. Duane,
Troy, Pennsylvania
WATKINS, E.B.
Elkland, Pennsylvania
WILEY, Ila, Chairman
Nelson, Pennsylvania

EXECUTIVE OFFICERS OF ADMINISTRATION

TRAVIS, JANET L. (1979), President
B.A., Boston University; M.A., Boston University; Ph.D., Boston University.

TRAVIS, DENNIS M. (1979), Vice President for Academic Affairs
B.S., Edinboro State College; M.Ed., Edinboro State College; Ph.D., Miami University.

SCOTT, ROBERT L. (1971), Vice President for Student Affairs
B.S., University of Nebraska; M.Ed., University of Nebraska; D.Ed., University of Nebraska.

GRIBBLE, JOHN R. (1977), Dean of Administration
B.S., Shippensburg State College.

KELCHNER, ROD C. (1964), Dean of Development and External Relations, Associate Professor
B.S., Bloomsburg State College; M.S., Bucknell University.

SCHWARTZ, HAROLD E. (1971), Dean of Finance and Planning
B.S., University of Maryland; M.A., University of Maryland.

ACADEMIC AND ADMINISTRATIVE OFFICERS AND STAFF

ABPLANALP, JOHN J. (1979), Acting Director of Admissions
B.S., Mansfield State College; M.Ed., Mansfield State College.

BEISEL, WILLIAM H. JR. (1972), Dean of Continuing Education, Professor
B.S., West Chester State College; M.S., Pennsylvania State University; D.Ed., Pennsylvania State University.

BENSON, ROBERT R. (1971), Director of Personnel
B.A., Pennsylvania State University.

BIANCO, CARMEN (1979), Assistant Director of Residence Life
B.S., Duquesne University; M.S., Mansfield State College.

BOTTIGLIERI, JOSEPH A. (1978), Head Football Coach, Admissions Counselor
B.S., Bloomsburg State College; M.S., Indiana State University.

CLARK, THOMAS (1962), Director Buildings and Grounds

COLE, KEITH T. (1964), Director of Safety & Security, Police Officer.

COSTELLO, THOMAS J. (1958), Assistant Athletic Director, Associate Professor
B.S., Shippensburg State College; M.S., Bucknell University.

CRISP, CLARENCE J. (1976), Director Student Activities
B.A., University of Wyoming; M.A., University of Wyoming.

DIBIASE, ELAINE R. (1969), Acting Director of Library Resources
B.A., University of Rhode Island; M.A., University of Wisconsin; D.Ed., The Pennsylvania State University.

HALTON, PATRICE A. (1977), Associate Director of Admissions
B.S., George William College; M.S., St. Cloud State University.

HIGGINS, JOHN M. (1980), Dean, School of Professional Studies
A.B., Los Angeles State College; M.A., Los Angeles State College; Ed.D., University of Toronto

JOHNSON, W. MICHAEL (1974), Director Counseling, Career Development and Placement Services, Associate Professor
B.S., Indiana University of Pennsylvania; M.Ed., University of Colorado; Ph.D., University of Northern Colorado.

JONES, MARGARET G. (1966), Director of Doane Health Center, Assistant Professor
R.N., Robert Packer Hospital; B.S., Mansfield State College; M.S., Elmira College.

KOLLAR, FRANCIS J. (1966), Coordinator of Placement, Assistant Professor
B.S., St. Vincent College; M.Ed., Millersville State College.

MARESCO, JOSEPH R. (1972), Director of Student Services, Assistant Professor
B.S., State University College at Brockport; M.S., State University of New York at Albany.

MILLER, MILDRED P. (1951), Professor, Director of Educational Field Experience
B.S., Lock Haven State College; M.Ed., The Pennsylvania State University; D.Ed., The Pennsylvania State University.

MONOSKI, JOHN J. (1978), Registrar
B.A., Ohio Wesleyan University; M.A., Duke University.

PASKVAN, BARBARA T. (1970), Affirmative Action Officer, Instructor
B.A., Potsdam New York; M.S., Miami University.

REMY, RONALD E. (1965), Director Audio Visual Center, Associate Professor
B.S., California State College; M.A., West Virginia University.

ROBERTS, ESTHER C. (1966), Director of Financial Aid, Instructor
B.A., Vassar College.

RUSSELL, DAVID H. (1971), Director EEOP, Learning Resources Center, Assistant Professor
B.S., Mansfield State College.

SEFLER, GEORGE F. (1969), Dean, College of Arts and Sciences, Professor
B.A., DePaul University; Ph.D., Georgetown University

SERINE, ENRICO A. (1970), Assistant Director of Financial Aid, Assistant Professor
B.S., Bloomsburg State College; M.Ed., Shippensburg State College; D.Ed., University of Arkansas.

SMART, JAMES G. (1977), Assistant Director of Residence Life
B.A., Indiana University of Pennsylvania; M.S., University at Albany; Ed.S., University at Albany.

THOMPSON, KATHLEEN M. (1979), Admissions Counselor
B.A., Mansfield State College.

ACADEMIC DEPARTMENT CHAIRPERSONS

BURKETT, GEORGE I. (1969), Foreign Languages
B.A., University of Oklahoma; M.A., University of Oklahoma.

CLARK, OWEN A. (1966), Mathematics
B.S., Pennsylvania State University; M.A.T., Brown University.

DEGENARO, ARTHUR P. (1969), Health and Physical Education
B.S., Kent State University; M.Ed., Kent State University; Ph.D., The Ohio State University.

EVANS, LESLIE D. (1967), Secondary Education
B.S., Mansfield State College; M.Ed., The Pennsylvania State University

FROMBACH, ERNEST (1968), Art, Acting, Fall Semester, 1980
B.S., Indiana University of Pennsylvania; M.Ed., Indiana University of Pennsylvania.

GEORGE, ARNOLD (1968), Chemistry
B.S., University of Massachusetts; Ph.D., University of Massachusetts.

GRACE, JOEL E. (1969), Psychology
B.A., Franklin and Marshall College; M.A., University of Waterloo; Ph.D., University of Waterloo.

KELLER, KATHERINE E. (1953), Home Economics
B.S., The Pennsylvania State University; M.S., The Pennsylvania State University.

LAPPS, A. VERNON (1968), Speech, Communications, and Theatre.
A.B., University of Michigan; M.A., Wayne State University; Ph.D., Ohio State University.

MILLER, LAURANCE W. (1978), Sociology and Social Work
B.A., Susquehanna University; M.S.W., University of Pittsburgh.

MULLEN, GEORGE H. (1969), Physics
B.A., Rutgers University; M.S., Syracuse University; Ph.D., Syracuse University.

MURPHY, ROBERT E. (1965), Political Science
B.S., California State College; M.A., Villanova University.

PFLUGER, LUTHER W. (1969), Elementary Education
B.S., University of Texas; M.Ed., North Texas State University; D.Ed., Teachers College, Columbia University.

RYAN, EDWARD S. (1975), Criminal Justice Administration
B.A., Fordham College; M.P.A., City University of New York; M.A., State University of New York; Ph.D., School of Criminal Justice at Albany.

SAVESON, JOHN E. (1966), English
B.A., Denison University; M.A., University of Chicago; Ph.D., University of Cambridge.

SLABEY, THEODORE M. (1972), Business, Economics, and Computer Science
A.B.D., Lehigh University; M.F.A., George Washington University

SMICHOWSKI, VINCENT P. (1965), Biology
B.S., Mansfield State College; M.Ed., The Pennsylvania State University; D.Ed., The Pennsylvania State University.

STICH, THOMAS F. (1969), Special Education
B.S., Lock Haven State College; M.Ed., The Pennsylvania State University; D.Ed., The Pennsylvania State University.

TRINDELL, ROGER T. (1970), Geography and Regional Planning
B.A., Montclair State College; M.A., University of Colorado; Ph.D., Louisiana State University.

UNGER, ROBERT W. (1965), History
B.A., Olivet Nazarene College; B.A., University of the Philippines; M.A., Ball State Teachers College; Ph.D., Ball State University.

ZDZINSKI, EDWIN E. (1966), Music
B.S., State University of New York (Fredonia); M.A., Teachers College, Columbia University; Ed. D., Teachers College, Columbia University.

LOCATION AND CAMPUS SETTING

Mansfield State College is located in the wooded hills and rolling farmlands of northern Pennsylvania. Its 175-acre hillside campus overlooks the borough of Mansfield and the Tioga River valley.

Buildings on the campus are a mixture of traditional and modern styles, set among open lawns and tree-shaded walks.

Rising above newer rooftops is North Hall, the oldest structure on campus. Housing most of the college's facilities in early years, it is now the home of a computer center and TV studio.

Other features of the campus include Grant Science Center, with its planetarium, solar collector, science museum, and animal collection. Decker Gymnasium, the college's athletic center, has an Olympic-size swimming pool.

There are three libraries and three auditoriums on campus, in addition to an experimental theater in a tent-sided pole barn for summer productions. Art galleries are located in Alumni Hall and the Art Haus. The college's student-operated radio station broadcasts from South Hall.

Most Mansfield State College students live in high-rise residence halls, which include study areas, lounges, recreation rooms, telephones in all rooms and laundry facilities.

Ski slopes, camping areas, lakes and hiking trails are all within an hour's drive at such places as the Pennsylvania Grand Canyon, Hills Creek Lake State Park, and Oregon Hill Ski Area. Other available outdoor sports are river-rafting, cross-country skiing, trout fishing and hunting.

HISTORY

Mansfield State College traces its heritage back to 1857 when the Mansfield Classical Seminary opened with 105 students.

In 1862, Mansfield became a State Normal School. Most of the students took the elementary curriculum, but scientific courses were also offered, and the first catalog (1864-66) notes a music department.

Until 1874, the school was housed in just one building. By 1890, there were four buildings, and students and faculty members had planted trees for landscaping on the campus, which previously had been almost bare of trees. The student body grew to 400 students by 1905.

In 1926, the State Council of Education authorized Mansfield to grant bachelor of science degrees in Elementary and Secondary Education, Music, and Home Economics. On May 13, 1927, Mansfield became the first institution in Pennsylvania to be designated a State Teachers College.

Mansfield State College assumed its present name in 1960. A four-year, coeducational, fully-accredited institution, the College now consists of two divisions: the College of Arts and Sciences and the School of Professional Studies. Mansfield State offers approximately 50 undergraduate degree programs. The College also offers Master's Degree Programs through its Office of Graduate Studies.

In the Fall of 1979, over 2,300 undergraduate students and 315 graduate students were enrolled in the College's classes. Today the campus is 175 acres in extent and the college complex includes more than 30 buildings.

COLLEGE LIBRARIES

The College Libraries provide students and faculty with a well-selected and representative collection of materials in all fields of study. The Libraries contain more than 184,000 volumes and 377,400 volume equivalents in microform. Serial subscriptions number 2,044. Approximately 14,000 audio-visual materials are also held. Since 1968 the Libraries have been a selected depository for U.S. Government Documents.

Most of the Libraries' collections are in the Main Library located on the upper two floors of Alumni Hall. This facility can accommodate 350 readers in a variety of seating-

lounge furniture, study carrels, tables and chairs. Subject-specialist librarians are available to help individual users as well as provide group instructional experiences.

Branch Libraries are located in the Butler and Retan Centers. Butler Center has the music collection and related materials, including over 7,000 phonograph records and cassettes. The latter are accessible to users through stereo listening rooms.

Retan Center houses all educational materials, including the E.R.I.C. Collection. Also included is a curriculum materials collection representative of the books, curriculum guides, cartridge sound films, cassettes and other materials used in elementary and secondary schools. Users may preview all audio-visual materials on a variety of instructional devices.

The Libraries are actively involved in the shared acquisition and use of materials on both regional and state levels. Specialized materials not available in their collections may be borrowed from other libraries. An in-house computer terminal is used to provide information regarding country-wide locations of materials and to speed inquiries through the interlibrary loan networks.

STUDENT SERVICES

RESIDENT HALLS

Education, in its broadest sense, is a product not just of classroom learning, but also of knowledge gained from sharing ideas and experiences with others in the informal situations which residence halls provide. The Residence Life staff at Mansfield State College works with the residence hall councils of each building, student staff members (Residence Assistants) and interested faculty members in an effort to provide a positive environment which will help supplement and expand the education of each student.

The College, recognizing the value of diversity, is interested in having students representing all creeds, races and ethnic groups living in College residence halls. Therefore, in compliance with the Pennsylvania Fair Education Practice Act, all residence hall assignments are made without regard to race, religion, color or national origin. Having accepted the Pennsylvania Fair Education Act, the staff feels that a cross section of cultures provides a cosmopolitan community. The College also complies with all applicable Federal Civil Rights Laws.

RESIDENCE REQUIREMENTS

1. All students are required by the College to reside in residence halls when there is space available.
2. Exceptions to the above may be made on the basis of age, place of permanent residence, or marital status.
3. Each student, prior to occupying a room, must sign a housing agreement provided by the College and pay all designated fees and deposits.
4. Board in the College dining hall is mandatory for students residing in residence halls. Waivers for medical reasons may be requested through the Office of the Director of Student Services.
5. All students residing in residence halls are required to abide by regulations as prescribed by the College and/or residence hall council.
6. Mansfield State College reserves the right to enter and inspect all residence hall rooms, but will in all possible circumstances recognize and respect the individual's right to privacy.
7. Checking into a College residence hall implies acceptance of the terms of the Residence Hall Agreement.

VETERANS BENEFITS

Under present regulations, student veterans are eligible for a variety of aid in addition to their GI Benefits; all aid of course depends on residual need. Processing of GI Benefits and financial advice to Veterans is an additional function of the Financial Aid Office.

COUNSELING, CAREER DEVELOPMENT, AND PLACEMENT SERVICES

This office is designed to assist students in making decisions related to the immediate problems of adjustment to college living. An important aspect of this adjustment is to be able to make decisions regarding career and life goals and to assist students in seeking appropriate professional employment upon successful completion of their academic program.

Students are invited through Counseling to explore freely and in complete confidence, problems, feelings, and information designed to increase their self-understanding and growth in the direction of individual choice. Professional staff members assist this process through personal interviews, appropriate testing and assessment when deemed necessary, and by providing information needed by the student that will allow meaningful decisions to be made.

The Career Development function provides an opportunity for student self-evaluation, occupational skills and interests evaluation, and vocational outlook opportunities. A career library is available to those students wishing to pursue their interests in depth.

The Placement Service's basic function is to assist students in securing meaningful employment upon graduation. Job vacancies, civil service opportunities, and teacher vacancies are publicized to seniors and alumni who are registered with the Center. On campus interviews are scheduled and conducted by representatives of business, industry, public schools and civil service agencies. Students' placement credentials are available to potential employers upon mutual request. It is important, therefore, that students desiring interviews with potential employers, or who are applying for positions, be registered with the service and have credential folders completed.

This office also serves as a testing center for national testing programs relevant to students' future goals. Graduate Record Examinations, Miller Analogies Tests, and the National Teacher Examination are but a few of the more common assessment instruments designed to allow students to progress yet another step in their career/life goals. Students are encouraged to be alert for campus announcements of testing dates and their registration deadlines.

As a student, it is to your advantage to make use of these varied services throughout your college career. The Center is located in the Richards House immediately across from the Infirmary. Hours are from 8 A.M. to 4:15 P.M. Monday through Friday and by appointment at other times when necessary.

DOANE HEALTH CENTER

The College Health Service operates in a modern fully equipped facility which provides every convenience necessary for the health needs of students. The health care is rendered by physicians and full-time nurses. The services are extended to all students of Mansfield State College.

The personnel of the health center strive to educate the students in all aspects of healthful living and promote good health habits.

The main objectives of the health center staff are to furnish services which appraise the health status of students through medical examinations, health histories, cumulative health records and follow-up as well as to examine and treat students for any acute illness.

Members of the health service staff try to furnish a thorough, but friendly and individual service to which a student may come for confidential health care.

COLLEGE ACTIVITIES AND ORGANIZATIONS

The student activities program has been organized to encourage student participation in many areas of academic, social, ethical, cultural, and recreational life. With a wide variety of activities each student is given the opportunity to enlarge his cultural development through group participation. The entire program is a supplement for classroom learning, social living and spiritual fulfillment.

Descriptions of the organizations are detailed in the student handbook.

Honorary Organizations

Alpha Psi Omega (Dramatics)
Delta Phi Alpha (German)
Kappa Delta Pi (Scholarship)
Kappa Kappa Psi (Men's Band)
Kappa Omicron Phi (Home Economics)
Pi Delta Phi (French)
Phi Sigma Pi (Men's Scholarship)
Sigma Delta Pi (Spanish)
Sigma Zeta (Science & Math)
Tau Beta Sigma (Women's Band)

Special Interest Organizations & Publications

All Residence Hall Council
Art Student's Guild
International Awareness Association
Campus Ministry
Carontawan (Yearbook)
Chemistry Club
Conception (Literary Magazine)
Council for Exceptional Children: Omega Rho Chapter
Day Student Organization
The Falcon (Professional Literary Magazine)
The Flashlight (Newspaper)
History Club
Inter-Fraternity Council
Inter-Varsity Christian Fellowship
Intramural and Recreational Sports
Kappa Phi (Methodist Women)
The Mansfieldian (Alumni Magazine)
Mathematics Club
Music Educators National Conference
Omicron Gamma Pi
Panhellenic Council
Phi Mu Alpha Sinfonia (Men's Music)
Philosophy Club
Physics Society
Players (Dramatics)
Psychology Club
Radio Station
Readers Theatre Showcase
Sandy Apples Club (Sociology-Anthropology Majors)
Sigma Alpha Iota (Women's Music)
Ski Club
Spanish Club
Student Government Association
Student PSEA-NEA
Young Democrats

MANSFIELD UNITED CAMPUS MINISTRY

The Mansfield United Campus Ministry represents, through its ecumenical presence, the Church on campus and the Christian concern for the spiritual dimension in the development of the whole person. Through word, witness and worship it fosters among students and faculty a ministry of service rooted in faith, hope, and love. The service

takes the form of a variety of programs designed to meet not only the needs of the college community but also the needs of the community at large, such as ministry to the aged and orphans, workshops and seminars on contemporary religious issues, prayer and Bible study groups, folk liturgies and experimental worship.

STUDENT HEALTH INSURANCE PLAN

Mansfield State College offers its full-time students, through Higham-Whitridge, Inc., a comprehensive hospital, surgical, and medical insurance program which provides twelve-month protection against the cost of injury or illness. This policy covers the student not only while in school, but during school holidays, summer vacations and other times when the student is away from the College.

Full-time students will be covered under the plan effective September 1 through the next August 31, provided they register and pay the insurance fee appearing in the student bill by registration date.

Students who do not register until the start of the second semester will be covered when the second semester begins through August 31 provided they register and pay the insurance fee appearing in the student bill by registration date.

Coverage includes such areas as hospital bills, surgical benefits, diagnostic X-ray and laboratory examinations, and numerous other areas. For complete information ask for a brochure from the Office of the Vice President for Student Affairs.

INTERCOLLEGIATE ATHLETICS

Mansfield State College is committed to a representative program of Intercollegiate Athletics. Physical facilities (playing areas) and coaching services are provided by the institution. Equipment, travel funds, and other support services are funded by a student dominated corporation, titled College Community Services, Incorporated (C.C.S.I.). Students may participate in Men's & Women's Basketball, Men's & Women's Tennis, Men's & Women's Track, Men's Golf, Men's Cross Country, Men's Wrestling, Men's Baseball, Men's Football, Women's Field Hockey, Women's Swimming, Women's Volleyball, and Coed Bowling.

The College is a member of the National Collegiate Athletic Association, the Eastern Collegiate Athletic Conference, the Pennsylvania State Athletic Conference, the Eastern Association of Intercollegiate Athletics for Women, and the Association of Intercollegiate Athletics for Women.

INTRAMURAL RECREATION

A program of intramural recreation activities including men's, women's and coed leagues and tournaments in flag football, softball, volleyball, basketball, tennis, badminton, archery, innertube waterpolo, innertube water basketball, cross country, and track and field are provided for those seeking fun and enjoyment through physical activities. Most activities are conducted in the late afternoon and evening hours. There are many opportunities for student employment as intramural officials and time/scorekeepers. Students interested in participating or working should inquire at the Intramural Office located in Decker Gymnasium.

STUDENT GOVERNMENT ASSOCIATION

Student Government consists of an Executive Council and a Senate.

The Executive Council consists of one President, one Vice President of Academic Affairs, one Vice President of Administrative Affairs, and one Vice President of Social Affairs. To run for the executive council a student must be a full-time undergraduate who has completed 24 credits and will be enrolled for the next two academic semesters.

The Senate is composed of one Senator for every 100 students. The Senate chooses its own officers and the Chairperson may vote only when the Senate is equally divided.

Student Government's Committee of Finance is responsible for appropriating the Student Activity Fee with final approval of the Senate. The members of the Committee of Finance are appointed to the committee by the President of SGA. The Committee of

Finance allocates monies to various campus organizations to insure recreation for the Student Body.

Various Committees of SGA are responsible for initiating change on Mansfield's campus. Any student may find out about the various faculty, administrative, or student committees by expressing interest at the SGA office located 214 Memorial Hall. The membership or appointment to each committee is done by the President of SGA with confirmation of the Student Senate. Mansfield State College's Student Government Association is a member of CAS and every student at Mansfield State College is also a member.

AUTOMOBILES

Mansfield State College reserves the right to designate and assign areas in which student parking will be permitted.

All students who have or use automobiles must register them with the Security Office during registration. Vehicles brought to campus after registration are to be registered with the Security Office within 24 hours.

Regulations pertaining to vehicle use are distributed at the time of registration. Students are responsible for knowledge of the regulations and for obeying same.

GENERAL COLLEGE REGULATIONS

Acceptance of admission to Mansfield State College constitutes agreement to comply with its rules and regulations. Every student, regardless of age or location of college residence, is responsible for knowledge of these rules and regulations as outlined in the Password, the student handbook. The student is also responsible for knowledge of any and all revisions or additions of college rules and regulations.

Basic to the code of conduct are the regulations governing alcoholic beverages, illegal drugs, public disturbances, gambling, and student obligations and responsibilities. These policies have been formulated by a joint student-faculty committee and adopted by the Student Government Association and the College Board of Trustees.

Responsibility of enforcement lies in the Mansfield Judiciary System. It has been established to protect the student's individual rights as well as the welfare of the institution regulated by the laws of the Commonwealth of Pennsylvania. The College reserves the right to exclude, at any time, a student whose conduct or academic record proves unsatisfactory. Further information on the Judiciary System can be found in the Password.

THE EDUCATIONAL SERVICES CENTER

In an effort to provide a broad spectrum of support services for students who enroll at Mansfield, an Educational Services Center has been developed. A staff of professionals is available to assist and direct students as they move through their first year of college.

Academic advisement will be a prime responsibility of those who staff the Center. In addition, the Center will offer a variety of counseling services.

Helping the student to develop basic academic skills is another goal of the Center Staff. Special attention will be given to providing diagnostic services in mathematics, reading, and writing.

OPPORTUNITIES FOR THE SUPERIOR STUDENT

HONORS PROGRAM

The Honors Program is an academic opportunity for superior students; it is an enhanced and intellectually challenging college experience. The program offers special honors courses that stimulate thought, discussion and study, and it fosters an enriching cultural and social environment.

During their four years at Mansfield, students in the program supplement their regular college studies with honors courses in the humanities, physical sciences and social sciences. There are also honors electives and an honors seminar for seniors.

The program's interdisciplinary emphasis is perhaps its most distinctive feature.

Instead of categories of information studied in isolation from one another, the courses offer a balanced diversity of subjects — and students explore the connections between these subjects.

The Honors Program is for highly-motivated students who have shown the potential to master demanding academic work. The Honors Council, which selects all participants for the program, gives consideration to each student applicant's high school grades, position in his or her graduating class, extra-curricular activities, and college entrance test scores.

Up to 50 entering freshmen are admitted to the program each year. Interested freshmen and sophomores at Mansfield who have established good academic records may also apply for admission to the Honors Program.

Students in the program take one or two honors courses each semester. With the assistance of their academic advisors, the students select the rest of their courses from the college's regular course offerings, taking care to meet all requirements for graduation and for their academic majors.

To complete the Honors Program, students take a minimum of seven honors courses totaling 21 credits. Students whose work includes a semester of independent research receive an additional three credits.

The program begins in the freshman year with two honors humanities courses, one during each semester. Selected themes and ideas in Western culture are traced from the ancient world to the 20th century. The courses examine literature, art, music, philosophy and history.

During their sophomore and junior years, students in the program take one honors course in social science and one in natural science. Broadly interdisciplinary, these courses focus on the methods of scientific study. In addition, the students take at least two honors elective courses.

In their senior year, honors students enroll for a one-semester seminar in which they share and discuss the results of the work they have done in their areas of academic interest. The students are also encouraged to undertake independent research projects and to report the outcome of their research in papers or oral presentations.

Students are expected to maintain at least a 3.0 (B) overall average in their college work to remain in the Honors Program. Upon graduation, each student completing the program with at least a 3.0 average in honors courses will have noted on his or her transcript: "This student has completed the College Honors Curriculum." Each student with at least a 3.5 average in honors work and at least a 3.25 overall average will have noted on his/her transcript: "This student has completed the College Honors Program Curriculum with distinction."

All honors work is identified as such in each student's academic record. Being a member of the Honors Program will aid a student in gaining admission to graduate programs in law, medicine and other fields.

CREDIT BY EXAMINATION

A student in good academic standing may request permission to take a comprehensive examination in a particular course offered by the College. All requests for credit by examination must be made to the department chairperson involved and reviewed by the Assistant Vice President for Academic Affairs. A student must present evidence that he is sufficiently competent to warrant the examination.

Students follow the procedures outlined below in order to obtain permission and then to take a course credit by examination. Except under unusual circumstances, the examination must be taken during the first month of the semester.

Courses in the areas of independent study, ensemble or other group participation courses, student teaching or pre-professional experience, seminars or selected topics, and laboratory experience may not be taken credit by examination without approval of the department offering the course and the Office of Academic Affairs.

When a course is passed by examination, the student receives no grade for the course.

An EXS is recorded on the student's permanent record. If the student fails the course, there is no notation on the record. However, since a failed course may not be attempted by examination a second time, a record of the fact that the student has taken the course by examination is kept in the student's file until graduation.

PROCEDURES FOR CREDIT BY EXAMINATION

A. The student contacts the department chairperson for the department of the course desired to be taken credit by examination and contacts the Assistant Vice President for Academic Affairs.
B. Concurrently or following the above contact, the student completes a petition explaining the request and rationale and presents the petition signed by the above department chairperson to the Assistant Vice President for Academic Affairs.
C. Authorization to take the specified course credit by examination will be given to the student and must be taken to the Revenue Office where the student pays the $25.00 fee (subject to change as per directive by the State).
D. The department chairperson sets the date for the examination and later notifies the Assistant Vice President for Academic Affairs whether the student passed or failed the examination.
E. If the student passed the course, the Assistant Vice President for Academic Affairs will so notify the Registrar who will record the course and "EXS" on the student's semester grade report. The Registrar's Office will then record the course and EXS on the student's permanent record.

Students may also take part in the College Level Examination Program (CLEP) by contacting the Counseling Center. Mansfield State College gives credit for the CLEP Subject Examinations but at the present time does not give credit for the CLEP General Examinations.

ADVANCED PLACEMENT

Courses taken before admission to college under the Advanced Placement Program conducted by the Educational Testing Service, Princeton, New Jersey, may be applied toward graduation requirements by students who are admitted to the college to pursue one or more semester's work. To secure such credit the student must make formal application to the Office of Academic Affairs. The course may satisfy college requirements and the score on the Educational Testing examination must be satisfactory to college officials. Not more than twelve credits earned by such examination may be applied toward graduation requirements.

ADMISSION OF UNDERGRADUATE STUDENTS TO GRADUATE COURSES

An undergraduate student at Mansfield State College may be admitted to a graduate course (500 level) providing the student:

A. Satisfies the requirements for admission with full graduate standing, except for having the bachelor's degree.
B. Is within twelve semester hours of having satisfied all of the requirements for the bachelor's degree.
C. Has the permission of the Dean of Graduate Studies.

The total load of courses, undergraduate and graduate, may not exceed fifteen semester hours.

The graduate course(s) may be applied toward the student's undergraduate total of 128. However, if the graduate credits raise the student's total above 128, the course may count as graduate credit upon conferral of the bachelor's degree. This does not imply automatic admission into the Graduate Division. Admission under these conditions would be on a conditional status.

DEAN'S LIST

The Dean's List is issued at the close of each semester. It includes only undergraduate students. Students must earn at least twelve (12) credits for which a letter grade is receiv-

ed (P/F and S/U grades are excluded). The semester quality point average must be a 3.50 or above.

HONORS

Superior scholastic achievement is recognized at Commencement. Such recognition becomes a permanent part of every graduating senior's record, with designations based upon cumulative point average as indicated:

Cum Laude	3.35 to 3.64
Magna Laude	3.65 to 3.94
Summa Cum Laude	3.95 to 4.00

ADMISSIONS

REQUIREMENTS FOR ADMISSION

1. General scholarship as demonstrated by:
   a. graduation from an approved secondary school or equivalent preparation as determined by the Credentials Evaluation Division of the Pennsylvania Department of Education.
   b. a satisfactory score of 800 or better in the Scholastic Aptitude Test of the College Entrance Examination Board or 19 or better on the A.C.T.
2. Class rank in the upper three-fifths of the graduating class. Completion of the following secondary school work is recommended as minimum preparation:

English	3 credits
History of Social Studies	2 credits
Laboratory Science	2 credits
Algebra and/or plane geo.	2 credits
Foreign Language	2 credits
Electives	5 credits
	16 TOTAL

When a student has been granted permission and fails to enroll, his acceptance for admission will be valid for no more than two years following the month for which admission was granted. After two years such students must reapply for admission as new applicants and meet the standards for acceptance current at the time of reapplication.

The College reserves the right to establish or change admission standards as it deems necessary.

Mansfield State College offers an Equal Education Opportunity Program designed for individuals who do not qualify for regular admission, but who demonstrate a potential for success in college. This program offers assistance through supportive services to students. A personal interview is sometimes required for consideration into the program.

All applications for admission should be made to the Director of Admissions, Mansfield State College, Mansfield, PA 16933.

APPLICATION PROCEDURES (FRESHMEN)

1. Return the application form with a ten-dollar, non-refundable application fee. Applicants will be accepted beginning July 1 following the junior year of high school.
2. Submit an official high school transcript. The student's high school counselor can send a xerox copy of your official transcript or he/she may use the secondary school transcript form attached to the Mansfield State College application.
3. S.A.T. scores or A.C.T. scores should be forwarded to the Admissions Office.

EARLY DECISION

Consideration for early decision for fall entrance will be given to those candidates who meet prescribed requirements in terms of secondary school achievement and junior year S.A.T. scores. Those offered admission through early decision will be required to submit scores from a senior year examination of the S.A.T. Applicants who qualify for early decision will be notified approximately September 25.

APPLICATION PROCEDURES (TRANSFERS)

1. The applicant should send official transcript(s) from the college(s) previously attended. Transcripts and admission data should be sent to the Director of Admissions before April 1 for the fall semester or before October 1 for the Spring semester.
2. Transfer applicants for the fall semester are notified as early as December 1 prior to the desired enrollment date.
3. If at the time an applicant is approved for transfer to Mansfield State College he or she is enrolled as a student at another institution, it will be understood that such admission has been granted on a provisional basis only. The student must receive honorable academic and social dismissal before admission will be finalized. Application should be submitted no later than the fourth semester so that admission may be granted for the fifth semester.

Luzerne County Community College and Mansfield State College agree to mutual cooperation in correlating their respective programs for the Associate in Arts or Associate in Science and the Bachelor's degree in Arts or Sciences. Subject to the terms of this agreement, the student who has earned the Associate in Arts or Associate in Science degree at Luzerne County Community College is assured admission to Mansfield State College and advanced standing credit for courses of study completed at Luzerne County Community College. The student who has not completed the Associate in Arts or Associate in Science degree at Luzerne County Community College is entitled to apply for admission to Mansfield State College and for evaluation of his courses for which transfer credit is requested, but he does not enjoy the assurance which the agreement provides for the student who has earned the Associate in Arts degree or the Associate in Science degree. For more detailed information contact the Admissions Office.

Credit will be given for acceptable courses completed in accredited college institutions. Mansfield State College accepts undergraduate credit transferred from approved nonaccredited colleges. This credit is subject to validation by one year's successful work after transfer and may then be counted toward undergraduate degree requirements at Mansfield State College.

No student may be granted and receive a degree from this College without a minimum residence of one year. A minimum of thirty-two semester hours of work earned on campus will meet the requirements for one year residence.

Degree candidates who wish to pursue any part of the program of studies for a degree at another institution will be required to secure prior approval from the Office of Academic Affairs.

TRANSFER CREDIT

Following acceptance into the College, an evaluation of courses taken at the previous institution is made by the Registrar's Office in consultation with the chairperson of the student's major department.

ASSOCIATE IN ARTS AND ASSOCIATE IN SCIENCE DEGREES

Students entering Mansfield State College with an Associate in Arts degree automatically meet and close General Education requirements. However, any specific course within General Education which is required by the student's major department must be taken by the transfer student. (Example: Psychology 101 is required under Group V in most majors in the School of Education. If he/she has not already done so, the transfer student with an AA degree must take Psychology 101.)

Only Associate in Arts degrees meet General Education requirements. Course work from two year institutions culminating in all other degrees — Associate in Applied Arts, Associate in Science, etc. — must be evaluated course by course in application to General Education requirements.

Two exceptions to the situation outlined in the previous paragraph are the agreements concluded between M.S.C. and Luzerne Community College and M.S.C. and Corning Community College.

Students graduating from Luzerne with an Associate in Science degree in Education, General Studies, or Science will meet General Education requirements as long as their program electives correspond with those specified in the agreement between Luzerne and Mansfield. Specified also in the agreement with Luzerne are two definitive statements: an A.S. in Business Administration will be evaluated on a course by course basis; and an A.S. in Mathematics will automatically fulfill General Education. Regarding Corning, students who have graduated with an A.S. in Science degree in Business Administration, General Studies, Humanities-Social Science, or Mathematics Science will meet General Education as long as their program electives correspond with those specified in the agreement between the two institutions.

Students or faculty should check with the Registrar for an exact determination on transfer cases from Luzerne or Corning.

TRANSFER EVALUATION — GRADES

A. No grades or quality point average transfer from the previous institution. Credits transfer but not grades.
B. Courses in which a transfer student has received a "D" do transfer as credit.

TRANSFER EVALUATION — SEMESTER HOURS

A. The following is intended as a brief explanation of the most common systems — quarter and unit — which are utilized at other institutions. There are others. The system employed by a college will usually be indicated on the student's transcript. Questions should be addressed to the Registrar's Office.
   1. Quarter
      Courses transferred from institutions utilizing quarter hours must be converted to semester hours to obtain the number of transfer hours. Quarter hours are multiplied times 2/3; thus a three quarter hour course is equivalent to two semester hours, four quarter hours equal 2 2/3, five quarter hours equal 3 1/3, etc.
      While fractions for different courses are not added together to give more credit in, for example, Group III, the total number of transfer credits includes the fractions, i.e., the total number of quarter hours accepted in transfer is multiplied times 2/3, and the result is the total number of semester hours accepted in transfer. Any excess fraction in the total number of transfer credits is discounted.
   2. Unit
      In a unit system, one unit is usually equal to 3.5 semester hours. Thus, the number of units is multiplied times 3.5. A one unit mathematics course would be equivalent to 3½ semester hours. The treatment of fractional hours is the same as stated for the quarter hour system in the preceding paragraph.
B. The number of credit hours that transfer from another institution is the number which is given for completion of the course by the previous institution. For example, some institutions do not give credit for physical education courses. A student transferring to M.S.C. from such an institution would have met the physical education requirement at M.S.C. for as many physical education courses as taken previously, but no credit would be given at M.S.C. Similarly, an introductory biology course might carry three (3) credits at another institution. The transfer student would bring in three credits for such a course even though Biology 101 at M.S.C. is a four (4) credit course. Furthermore, if a U.S. history course is four credits at the previous institution, the transfer student receives four credits even though U.S. history at M.S.C. is a three credit course.

MAXIMUM HOURS ACCEPTED IN TRANSFER

Mansfield State College will not accept in transfer more than 67 semester hours of coursework from two-year junior or community colleges. Once M.S.C. has accepted a student with an associate degree for transfer that student may not transfer additional semester hours of coursework from two-year junior or community colleges.

NON-ACCREDITED COLLEGES

Credits transferred from non-accredited colleges or universities are received on a probationary basis. The student must achieve a 2.00 Q.P.A. after the first two semesters of matriculation as a full-time student (minimum of 24 semester hours) in order to validate the award of transfer credits.

READMISSION OF FORMER STUDENTS

All former students, except those in continuing education who have not been in regular attendance during the previous semester, must apply for readmission to the college.

An applicant for readmission should request an application form from the Office of Admissions and return it with the ten-dollar non-refundable re-evaluation fee by May 1 for the fall semester or by November 15 for the spring semester. A statement concerning the status of the applicant since withdrawal from the College, including such information as employment, college coursework completed, military service, etc., should accompany the application.

Students readmitted following a break of more than one semester fall under all college policies in effect at the time of readmission.

CERTIFICATION

Applicants desiring endorsement for teacher certification by Mansfield State College (e.g., B.A. in Biology degree holder seeking certification in Secondary — Biology; B.S. Secondary Education holder seeking added certification in Elementary Education) must complete or submit the following if they are not Mansfield State College graduates.

1. Personal interview with the Dean of Professional Studies.
2. Application form may be obtained from the Office of the Dean. The application should be completed and returned with a ten-dollar application fee.
3. Official transcripts of all college work completed.

Mansfield State College graduates desiring certification should contact the Director of Admissions for advisement.

EQUAL EDUCATION OPPORTUNITY PROGRAM

The Equal Education Opportunity Program (EEOP) is designed to assist individuals who have the potential to be successful college students but who do not qualify for regular admission to Mansfield State College. EEOP enables such individuals to enroll at Mansfield with support services: tutoring, counseling and academic advisement.

At present EEOP includes two academic programs. The Act 101 Program is designed for people who may have difficulties succeeding in college because of their educational backgrounds and because of financial difficulties. The Academic Opportunity Program (AOP) is designed for students who did not do well enough in high school to qualify for regular admission to Mansfield State College. Both programs are also designed to assist students who have been out of school for a long time and who consequently need to sharpen their academic skills in order to do well in college.

Each individual who is accepted by EEOP becomes a Mansfield College student with the same opportunities and responsibilities as other students at the college.

CONTINUING EDUCATION

The Continuing Education Program at Mansfield State College was created for the purpose of extending college services and facilities to all adult residents of the rural Northern Tier Region of Pennsylvania. Faculty from each of the academic departments cooperate with the Division by assisting with the selection of appropriate educational activities and by teaching. In addition, surveys are conducted each semester to determine the types of services desired by the area residents.

At Mansfield State College, courses and services are available to all Northern Tier citizens of Lycoming, Tioga, Sullivan, Bradford, Potter and parts of McKean and Cameron counties. The College Educational Delivery System also provides consultant, research,

and computer services to schools, community agencies, governmental agencies, business establishments, industrial firms, professional groups, and individual citizens. Groups who want to utilize campus facilities for conferences or workshops can arrange such events by contacting the Office of the Division of Continuing Education.

Admission to the College is not required for any courses offered in the Mansfield Continuing Education Program, though all students wishing admission in a degree program must be approved by the Admissions Office and, if applicable, the Graduate Office before their official admission. Non-admitted students may register for undergraduate credit courses as "special students" in most general studies classes. For graduate credit, "special students" are required to hold an undergraduate degree from an approved four-year college.

SUMMER SESSIONS

The Summer School sessions provide opportunities for students to satisfy a wide range of educational needs. Individual workshops are interspersed throughout each session. Course work may be taken for any one of several purposes: acceleration or advanced standing, certification requirements, or transfer work. The present program consists of undergraduate and graduate courses which meet degree requirements in all program areas offered by the College.

GRADUATE STUDIES

The College offers graduate programs leading to the master of arts degree in community psychology, music, and history. The master of education degree is offered in art, music, elementary education, special education, and social studies. The master of science degree is offered in education, special education-exceptional persons, home economics, and music. State certification programs are available for reading, social restoration, and supervisory I specialists.

Most graduate courses are offered in the evenings or summers at times convenient for professionals. For further information concerning graduate programs contact the Graduate Office or refer to the current graduate bulletin.

FEES AND CHARGES

(Fees are subject to change without notice)

FEES AND CHARGES

In effect fall, 1980 and spring, 1981

Application Fee	$10.00
Advance Deposit (1st semester)	$55.00
	Credit on Account

INSTRUCTIONAL FEES

The basic fee covers registration and the keeping of student records, use of the library, student welfare, health service and laboratory facilities. Fees for courses audited are the same as those taken for credit. The College offers a waiver of instructional fees to dependents of employees, graduate assistants, and to certain foreign students. Additional information concerning instructional fees is available through the Director of Accounting Services.

IN-STATE (Per Semester)

Full-time:

Undergraduates

$550 for 12 to 18 credit hours, then $46 for each additional semester hour

Graduates

$550 for 9 to 15 credit hours, then $62 for each additional semester hour

Part-time
Undergraduates
$46 per semester hour for less than 12 semester hours
Graduates
$62 per semester hour for less than 9 semester hours

OUT-OF-STATE (Per Semester)
Full-time:
Undergraduates
$965 — 12-18 semester hours, then $81 for each additional semester hour
Graduates
$550 — 9-12 semester hours, then $62 for each additional semester hour
Part-time:
Undergraduates
$81 per semester hour, for less than 12
Graduates
$62 per semester hour, for less than 9

SUMMER SESSIONS
Undergraduates
$46 per semester hour
Graduates
$62 per semester hour
Note: During the summer there is no difference between the in-state and out-of-state instructional fee.

A student shall be classified as a Pennsylvania resident for instructional fees purpose if he or she has a Pennsylvania domicile.

Domicile is the place where one intends to and does in fact permanently reside. Because the determination of whether a student intends to reside indefinitely in Pennsylvania is necessarily subjective, documentary evidence, statements from disinterested persons and the presumptions set forth below will be considered.

a. Continuous residence in Pennsylvania for a period of twelve months prior to registration as a student at a college or university in the Commonwealth creates a presumption of domicile. Although one is presumed not to be a domiciliary if one has resided for a shorter period before attending a college or university, a student may rebut this presumption by convincing evidence.
b. A person attempting to establish domicile must be a citizen or must have indicated by formal action his intention to become a citizen or must have been admitted to the United States on an Immigrant Visa. A tourist or student (non-immigrant) visa is not proof of domiciliary intent.
c. A married woman is presumed to have the domicile of her husband, however, such presumptions may be rebutted by convincing evidence of an independent Pennsylvania domicile. A Pennsylvania domiciliary who marries a non-resident shall continue to be classified as a Pennsylvania resident if he or she registers at a college or university within one year of his or her marriage.
d. A minor is presumed to have the domicile of his or her parent(s) or guardian. The age of majority in Pennsylvania for establishing a domicile for instructional fees purposes is twenty-one. However, a minor may prove emancipation and independent domicile through convincing evidence.
e. A United States government employee or a member of the armed forces who has domiciled in Pennsylvania immediately preceding entry into government service and who has continuously maintained Pennsylvania as his or her legal residence, will be presumed to have a Pennsylvania domicile. Others in government service may, by convincing evidence, establish Pennsylvania as their domicile.
f. A student receiving a scholarship or grant dependent upon domicile, from a state

other than Pennsylvania, is not domiciled in Pennsylvania.

A student may challenge his or her residency classification by filing a written petition with the Director of Accounting Services.

If the student is not satisfied with the decision made by the Director of Accounting Services in response to the challenge, the student may take a written appeal to the Dean of Administration.

Any reclassification resulting from a student's challenge shall be effective for instructional fees purposes as of the date such challenge was filed.

A student who changes his domicile from Pennsylvania to another state must promptly give written notice to the college or university.

HOUSING/FOOD SERVICES

Advance Room Deposit ..... $ 50.00
Credit on Account
Room and Board $708.00
Board only $328.00
Private Room (if available) $183.00
Extra per Semester

Includes CENTREX telephone service (does not include toll charges). Linens and pillows are not provided.

All Residence Hall students are required to participate in the Food Service Program at Mansfield State College, except where medical waivers are obtained. Students requiring a special diet for health reasons must obtain a copy of the diet and an excuse from an attending physician and submit both to the Director of Accounting Services for approval. If the Food Service is unable to furnish the diet, the student will be granted a Dining Fee Waiver. Student teachers and interns may also request this waiver from the Director of Accounting Services.

COMMUNITY BUILDING FEE

Undergraduates
1 to 6 semester hours ..... $ 2.50
7 to 9 semester hours ..... $ 5.00
10 or more semester hours $10.00

Graduates
1 to 6 semester hours ..... $ 2.50
7 to 8 semester hours ..... $ 5.00
9 or more semester hours $10.00

LATE REGISTRATION OR LATE PAYMENT FEE

Charged to students who register after the date officially set for registration. The same regulation shall apply to approved deferred payments.

TESTING AND COUNSELING FEE

One time: 1st semester $10.00
DEGREE FEE ..... $ 5.00
TRANSCRIPT FEE ..... $ 1.00

A student may be issued one free unofficial transcript each semester while in attendance at Mansfield State College. After the first transcript has been issued, a charge of $1.00 is made for each additional transcript.

When not enrolled one free transcript will be provided with the same charge of $1.00 for each additional transcript.

CERTIFICATION FEE $15.00

Charged prior to graduation for a Pennsylvania Teaching Certificate.

DAMAGE FEE (non-refundable) ..... $ 2.00

MISCELLANEOUS

Music Instruction Fee (graduate students and non-music majors) (per semester hour) $45.00

Music Lesson Fee (undergraduate music majors) per semester $45.00

Credit by Examination (per examination) $25.00

Med-Tech Fee $25.00

Administrative fee charged to students in the clinical period of the Med-Tech program in lieu of instructional fees payments.

ABOVE FEES PAYABLE TO THE COMMONWEALTH OF PENNSYLVANIA

STUDENT ACTIVITY FEE

Full-time Undergraduate (12-18 S.H.) $45.00

Part-time Undergraduate (7 to 11 S.H.) $20.00

Graduates optional at same rates.

All Undergraduate-Commonwealth Association of Students (CAS) ..... $ 1.00

ABOVE FEES PAYABLE TO COLLEGE COMMUNITY SERVICES, INC.

REFUND POLICY

Partial refunds of institutional fees will be made according to the following schedule only when:

A. A student voluntarily withdraws from college because of personal illness, certified by an attending physician, or because of such other reasons as may be approved by the Vice President of Student Affairs.

B. In the case of part-time Pennsylvania or out-of-state students dropping semester hours.

C. Full-time Pennsylvania residents, undergraduate students reducing their academic program below 12 semester hours. (Schedule changes must be approved by the Registrar.)

	Instructional Fee:	**Room Refund:**
1st Week	80%	80%
2nd Week	80%	80%
3rd Week	70%	70%
4th Week	60%	60%
5th Week	50%	50%
6th Week	None	None
7th Week	None	None

Dining will be charged at the rate of $20.50 per week for the period used. A student using dining on Sunday will be liable for payment for the entire week. No refund is made for fees other than instructional fees, room and board as outlined above.

D. In the case of full-time students reducing semester hours over the basic fee.

FEES ARE SUBJECT TO CHANGE WITHOUT NOTICE

INFIRMARY CHARGES

The services of the College's physician and nurses are available to those who are ill or injured. The cost of medicines and dressings for minor ills or injuries is included in the basic fee as previously explained; however, students must pay for special prescriptions or preventative vaccines. In addition, day students in the infirmary without dining privileges will be charged for the cost of meals.

DELINQUENT ACCOUNTS

Students will not be permitted to receive grades, to enroll for any semester, to receive a degree, or to have honored a request for a transcript of records until all overdue accounts have been paid. Students withdrawing from the College during a semester will be required to receive clearance of all accounts from the Revenue Office.

SUMMARY OF TYPICAL UNDERGRADUATE
EXPENSES PER SEMESTER

	IN-STATE	
	DORMITORY	COMMUTER
Instructional Fees (Full-time)	$ 550.00	$550.00
Room and Board	708.00	
Building Fee	10.00	10.00
Activity Fee	45.00	45.00
CAS Fee	1.00	1.00
Damage Fee	2.00	2.00
Testing & Counseling (First Semester Only)	10.00	10.00
Books & Supplies	100.00	100.00
	$1426.00	$718.00

	OUT-OF-STATE	
	DORMITORY	COMMUTER
Instructional Fees (Assumes Full-time)	$ 965.00	$ 965.00
Room and Board	708.00	
Building Fee	10.00	10.00
Activity Fee	45.00	45.00
CAS Fee	1.00	1.00
Damage Fee	2.00	2.00
Testing & Counseling (First Semester Only)	10.00	10.00
Books and Supplies	100.00	100.00
	$1841.00	$1133.00

FINANCIAL AID

The Office of Student Financial Aid exists to provide information and money to students. It attempts to inform the student population of application procedures and deadlines, of the types of aid available, the eligibility requirements and other pertinent data.

As a state college, Mansfield's basic fees are substantially lower than those of private colleges; the public subsidy is reflected in the fees to all students. While remaining committed to offering financial aid to able students who can show evidence of financial need, Mansfield State College must, however, recognize that the basic financial responsibility of acquiring a higher education continues to be the obligation of the student and his family.

Matriculation at Mansfield State College is by semester; the college expects each entering student to be able to meet the expenses of the upcoming term without assistance unless such aid has been previously arranged and confirmed.

The following points are emphasized:

(1) Students should file for financial aid immediately upon confirmed admission to Mansfield State College.

(2) To apply for aid, all students, regardless of the state in which they live, may file the PHEAA/BEOG application and the institutional (pink) application. The filing of these two documents constitutes a completed application for all available types of aid with the exception of the Guaranteed (bank) Loan, applications for which may be obtained from the student's hometown bank.

(3) Students should be advised that they must mention Mansfield State College (code 011046) as an institution of choice on the PHEAA/BEOG application. Failure to do this will mean that your needs analysis will not be available to Mansfield State College.
(4) Refer to the Financial Aid brochure for details on financial aid programs available, on deadline dates, and other particulars. Students and parents may call the Financial Aid Office 717-662-4129 for consultation at any time.

PART-TIME CAMPUS EMPLOYMENT

Part-time student employment at the College is available in the dining hall, library, dormitories, grounds and buildings, college union facilities, and offices. Such employment is awarded to students who have shown evidence of financial need. These positions are normally filled by upperclassmen, but a limited number of positions are open to freshmen. Requests for student employment are made after formal acceptance and payment of the advance registration deposit. Applications are available from and submitted to the Office of Student Financial Aid. Students must have a current FAF on file to establish eligibility.

Part-time State and Federal Workstudy Program employment is available at the College. For details see the Director of Student Financial Aid.

ACADEMIC PROGRAM

GRADUATE REQUIREMENTS

To graduate from Mansfield State College with a baccalaureate degree, a student must (1) pass at least 128 semester hours, (2) earn at least a 2.00 quality point average in all work attempted and in the major, and (3) complete the requirements for general education and for the major. To graduate with an associate degree a student needs to pass at least sixty-four (64) semester hours.

No student may be granted and receive a baccalaureate degree from the College without a minimum residence of one year. A minimum of thirty-two (32) semester hours of work earned on campus will meet the requirement for one year residence. For the associate degree at least fifteen (15) semester hours must be taken from Mansfield State College.

This minimum residence requirement usually means that the senior year is taken at the College; exceptions may be made with the approval of the Office of Academic Affairs. No more than sixty-seven (67) semester hours from a two year junior or community college will be accepted as transfer credit toward a baccalaureate degree.

It is the student's responsibility to know the all-college requirements for graduation and those of his or her major.

GENERAL EDUCATION

Philosophy of the Program

The General Education Program offers alternative course selections in order to provide the student with courses of study to meet individual needs, intents, and the basic undergirding requirements for the major. *The student bears the responsibility for meeting any specific group requirements as demanded for his eventual major.* Faculty advisors are available and willing to assist students in their selection of course work.

While the incoming student may or may not have a future area of study in mind at the time of entrance, the General Education Program is structured broadly enough to cover most alternative possibilities. Should a student enter the College with a definite major in mind, he would be assigned a departmental advisor in the department of his choice.

If an entering student is not ready to choose a major, he will be designated in the Undeclared category and will be assigned an advisor selected to work with Undeclared students. The advisor will assist the student in choosing courses to fulfill General Education requirements and advise him on exploratory means to select a major. A student may not graduate from Mansfield State College without a major, except for the Bachelor of Arts: General Studies. Therefore, the Undeclared student should have chosen a major by the end of two years or completion of sixty-four (64) hours.

General Education Requirements

The General Education requirements include three benchmark courses (which may be waived), a core of seven courses, and Model V.

English 090, Math 090, and EdEl 090 are benchmark courses to assure a minimal starting level of skill in written communication, in computation, and in reading. Incoming students will receive diagnostic testing. Whether students are required to take the 090 courses is determined by test results. Credits for these three courses do not count toward the 128 required to graduate.

The general education core requirements consist of ENG 112 and 313, SPCH 101, HPE 100, and three one-credit physical education activity courses (three-credit physical education courses do not meet the core requirement). ENG 313 must be passed with a grade of "C" or better. ENG 313 must be taken at Mansfield State College; therefore, no English composition course will be accepted in transfer for ENG 313. Transfer students who come having already taken a year of composition (I and II) will receive credit for ENG 112 (composition I) and for electives (composition II).

GROUP REQUIREMENTS

The student should plan his academic work in such a way that he meets: (1) the "core requirements" (as listed above), (2) any specific "group requirements" as required for his eventual major, and (3) any remaining General Education requirements in the "groups." The pattern to be followed for General Education may be most easily summarized in the following way — *the student elects four courses or a minimum of twelve semester hours in each of three different groups and two courses or a minimum of six semester hours in a fourth group.* The student may elect to take no courses in one group. For courses available in General Education please see the General Education Group Choices (Model V) listed below.

For many academic programs at the college the student's choice of groups and courses within the groups is not completely free. Frequently the requirements of a major specify that courses must be taken in one or more groups and sometimes the specific courses for a group are prescribed. Such requirements are explained within the description of academic programs found later in this catalog.

NOTE: The practice of allowing eleven (11) semester hours acquired from three courses (4, 4, and 3 semester hours) to close Group III evolved over the years due to three (3) and four (4) credit courses in the sciences. Students who closed Group III in such a manner were not meeting the requirement: students were neither taking four (4) courses nor earning twelve (12) hours. Beginning with students entering in June, 1976, eleven (11) semester hours and three courses will no longer be allowed. Students should consult carefully with their advisors; contact the Office of Academic Affairs with any questions.

Before selecting courses in the "Groups" the student should carefully read the requirements or recommendations for his expected major and degree. It is often to the advantage of the student to complete all General Education requirements during the first two years; however, a student may carry uncompleted General Education requirements beyond the first two years. All General Education requirements must be met prior to graduation.

A. A foreign student who comes to Mansfield State College from a country in which English is not the native language may waive the foreign language group (Group II) of Model V. No credit will be given, but the group is considered closed. The student must request application of this policy to him/herself within the first year of attendance and must supply documentation, if requested, of the dual language background.

B. If a student selects Group II (Foreign Languages), the Department of Foreign Languages requires a minimum of two courses in the same language — i.e., 6 semester hours. At the least the 102 level course must be completed to close the requirement as a two-course group. At the least the 202 level course must be completed to fulfill the requirement for a four-course group. The group can also be closed as a four course group by completing 202 and one advanced course, or by completing two advanced courses. Note that if the student begins at the 201 level or above, the group can be closed with only two courses and yet considered as if it had been closed with four courses.

C. If a student elects mathematics (Group IV), this Group will have been considered completed as a twelve (12) hour group by completion of any semester hours listed below or by six semester hours of more advanced mathematics courses beginning with MA 140 or 141.

D. Courses numbered 255, whatever the departmental prefix, are authorized to fulfill General Education requirements only with the approval of the Vice President for Academic Affairs. Information concerning which 255 courses have such approval for a given semester is available in the Office of Academic Affairs.

GENERAL EDUCATION GROUP CHOICES (Model V)

Group 1 — Humanities

ART
- ART H 101 Introduction to Art
- ART H 102 Survey of Art
- ART 201 Painting
- ART 210 Drawing I
- ART H 226 Oriental Art
- ART H 229 History of Black and American Indian Art
- ART 231 Printmaking
- ART 241 Color and Design
- ART 251 Jewelry I
- ART 271 Ceramics I
- ART 281 Sculpture I
- ART 295 Plastic and Tactile Crafts
- ART 345 Fibers

ENGLISH
- ENG 113 Introduction to Literature
- ENG 200 Survey of English Literature I
- ENG 201 Survey of English Literature II
- ENG 202 Survey of American Literature I
- ENG 203 Survey of American Literature II
- ENG 210 Literature of the Western World I
- ENG 211 Literature of the Western World II
- ENG 213 Crime in Literature
- ENG 215 Introduction to Black American Literature
- ENG 225 English Grammar
- ENG 226 History of the English Grammar
- ENG 232 Introduction to Folklore
- ENG 290 Introduction to Film Criticism
- ENG 291 Films and Filmmakers
- ENG 335 Creative Writing
- JOUR 100 Journalism
- JOUR 330 Press Performance
- JOUR 310 Interpretative Journalism

MUSIC
- MUS 100 Introduction to Music
- MUS 111 Basic Music I
- MUS 122 Classic and Romantic Music
- MUS 123 Post Romantic and 20th Century Music
- MUS 222 Medieval and Renaissance Music
- MUS 223 Baroque Music
- MUS 224 Introduction to Jazz

PHILOSOPHY
- PHIL 201 Introduction to Philosophy
- PHIL 202 Philosophy and Contemporary Issues
- PHIL 220 Eastern Approaches to Reality
- PHIL 230 Introduction to Logic
- PHIL 240 Ethics
- PHIL 250 American Philosophy
- PHIL 270 Existentialism
- PHIL 280 Philosophical Problems Within Western Religious Thought

SPEECH/THEATRE
ThTr 110 Introduction to Theatre
SPC 200 Oral Interpretation
SPC 201 Introduction to Mass Media
ThTr 202 Creative Dramatics
SPC 203 Voice and Articulation
ThTr 212 Fundamentals of Acting
SPC 305 Discussion and Group Dynamics

HONORS
HUM 100-101 Honors Humanities

Group II — Languages
Fr., Ger., Span.: 101 Introductory I
102 Introductory II
201 Intermediate I
202 Intermediate II
Ital. 101 and 102
Advanced courses by student petition.

Group III — Sciences

ASTRONOMY
Astro 105 Exploration of the Solar System
Astro 106 One Possible Universe
Astro 108 Observing the Fall Sky
Astro 109 Observing the Winter Sky
Astro 110 Observing the Spring Sky
Astro 111 Observing the Summer Sky
Astro 112 Aerospace

BIOLOGY
Bio 101 Man and the Biological World
Bio 102 Contemporary Biological Problems
Bio 210 Zoology
Bio 220 Botany
Bio 240 Local Flora
Bio 260 Fields Methods in Environmental Biology

CHEMISTRY
Chem 101 Introductory Chemistry
Chem 102 Organic and Biochemistry
Chem 103 Environmental Chemistry
Chem 106 Chemistry for the Allied Health Sciences
Chem 111 General Chemistry I
Chem 112 General Chemistry II

GEOLOGY
Geol 101 Earth Resources and Energy
Geol 121 Physical Geology
Geol 122 Historical Geology

PHYSICS
Phys 130 Home Made Physics
Phys 151 Physics for Poets
Phys 152 More Physics for Poets
Phys 165 Physics for the Allied Health Sciences
Phys 188 General Physics I
Phys 211 General Physics II
Phys 212 General Physics III

Group IV — Mathematics

MA 101 Fundamental Concepts of Mathematics
MA 105 Introductory Statistics
MA 107 Introduction to Computer Programming
MA 109 Finite Mathematics
MA 111 Fundamental Concepts of Calculus
MA 130 Algebra and Trigonometry
MA 140 Analytic Geometry and Calculus I
MA 141 Analytic Geometry and Calculus II
MA 160 Introduction to Applied Mathematics
MA 203 Topics in Algebra and Geometry
Advanced courses by student petition.

Group V — Social Sciences

ANTHROPOLOGY
Anth 101 Cultural Anthropology
Anth 102 Human Origins and Evolution

ECONOMICS
Econ 101 American Economy: Macro
Econ 102 American Economy: Micro
Econ 204 History of Economic Thought

EDUCATION
Ed 100 Schools and Society

GEOGRAPHY/REGIONAL PLANNING
Geog 102 Human Geography
RgPl 102 Introductory to Regional Planning
Geog 111 Physical Geography
Geog 222 Environmental Land Use and Natural Resources
Geog 282 World Regional Geography

HISTORY
Hist 101 Western Civilization I
Hist 102 Western Civilization II
Hist 104 The World in the Twentieth Century
Hist 201 American History Through the Civil War
Hist 202 American History — Reconstruction to the Present
Hist 205 History of Sports in American Society
Hist 210 Herstory: The American Side of Women's Past
Hist 232 Aztecs, Incas, Mayas
Hist 250 East European History

POLITICAL SCIENCE
PSci 100 Introduction to Politics
PSci 101 American Politics
PSci 202 State and Local Politics
PSci 210 Contemporary Issues in World Affairs
PSci 240 Public Administration

PSYCHOLOGY
Psy 101 Introduction to Applications of Psychology
Psy 210 Psychology of Family Relations
Psy 311 Introduction to Small Group Processes
Psy 320 Child Psychology
Psy 321 Adolescent Psychology

SOCIOLOGY
Soc 111 Sociological Perspectives
Soc 121 Contemporary Social Problems
Soc 302 Community
Soc 305 Sociology of Religion
SA 321 Futuristic Society
ED 100 Schools and Society

PROGRAM REQUIREMENTS

The requirements of a student's major are reflected on an Evaluation Record (ER) which is maintained in the Registrar's Office. Students will retain the original Evaluation Record provided them upon admission unless a change of curriculum form is provided by the student, carrying his or her signature indicating the student elects to "accept" a revised program. Students who break continuous enrollment for more than one semester, however, will be given the new Evaluation Record for the program should they readmit, unless circumstances suggest a petition of this policy. Curriculum change will affect only incoming students or those who "consent" to changes affecting the program originally provided.

Students readmitted following a break of more than one semester fall under all college policies in effect at the time of readmission.

Revised Evaluation Records will be prepared twice each year. When necessary, all curriculum changes approved will be collected and reflected in Evaluation Records issued in September and January registrations. Students changing from one curriculum to another, or to a revised program, will be processed for the earliest of these two program implementation dates.

If courses are deleted from programs for which no substitute is identified, the program requirement will be considered dropped. Otherwise, the department involved should identify the new equivalent required of students in the original program who have not yet satisfied the previous requirement.

INDEPENDENT STUDY

Independent Study is available in each curricular field. The appropriate curricular area prefix precedes the independent course number, 497, and the semester hours are from one to three. Independent study may be repeated for more than three (3) semester hours total, but one independent study project may be for no more than three (3) semester hours.

Independent study is an activity initiated by the student to increase his/her already advanced knowledge in a particular academic discipline. The subject is examined in an intensive manner with guidance by a faculty member who has special expertise in that subject.

To register for Independent Study a student prepares a "contract" (available at his/her Academic Dean's Office) which must be approved by the faculty director, chairperson, and dean. The contract sets forth a topical outline, reading list and/or other resources, papers or projects to be completed, and the basis for evaluating the student's work. A copy of the approved contract should be attached to the registration request, and a copy given to the student and faculty director.

VARIABLE SEMESTER HOUR COURSES

In addition to Independent Study other courses on campus may be taken for a variety of semester hours (e.g., some art courses, internships and preprofessional experience). Once the number of semester hours for such variable semester hour courses has been established through registration for the course with the Registrar's Office, the number of semester hours may not be changed. A variable credit card must be completed and returned to the Registrar's Office.

INTERDISCIPLINARY STUDIES

Frequently studies involving more than one curricular area are offered. Such courses (ID) may be applied to General Education requirements and, with departmental approval, may be applied to the major. Specific topics vary and will be announced each semester in the master schedule.

SPECIAL STUDY

A special study course is offered one time only by a curricular area for the purpose of (1) treating subjects of current but not lasting interest, or (2) experimenting with an innovative pedagogical or curricular design. The appropriate curricular area prefix precedes the numbers 255 for freshman/sophomore level and 455 for junior/senior level. Such courses are listed in the master schedule each semester under the departments offering the courses.

DUAL MAJOR

A student may earn a dual major by fulfilling all requirements for each major within the requirements of the degree which will be awarded. Both majors will be listed on the student's permanent record.

Concerning General Education courses and a dual major: courses for the second major count toward General Education, if applicable. However, courses for the first major count only in the major.

Students should indicate one major as primary and one as secondary. If the student neglects to so specify, the second major to be adopted will be considered by the Registrar's Office as secondary.

TIME SHORTENED DEGREE

The traditional undergraduate program is eight semesters. However, there are avenues available at the College that allow a student to earn a baccalaureate degree in less time. Included in these are carrying an above average course load, credit by examination, Advanced Placement, CLEP, and credit for military service.

CREDIT FOR MILITARY SERVICE

Veterans with a minimum of eighteen months of honorable service in the United States Army, Navy, Marine Corps, and Air Force may apply for credit in HPE 100 (Health) and HPE 101-103 (Physical Education). In addition, credit may be awarded for service training programs based on recommendations in the American Council on Education's *Guide.*

GRADUATION OUTLOOK FORM

In order to avoid problems arising from unmet graduation requirements a Graduation Outlook Form will be completed by the Registrar's Office. This form will be provided to the student prior to registration for the final thirty-two (32) semester hours of earned credit, or prior to the student's seventh regular semester. Students who are accelerating may request a Graduation Outlook earlier.

The Outlook Form lists the courses the student is taking during the current semester and notes the courses and/or requirements still necessary to be completed for graduation, as well as any deficiency in Q.P.A. A copy of the completed form is sent to the student and his or her department chairperson. However, it is the student's responsibility to review the form for possible discrepencies.

STUDENT ENRICHMENT SEMESTER

To expand the academic life opportunities for its students and to increase their chances to participate in specialized programs and courses not available at Mansfield State College, the College is part of the Student Enrichment Semester (SES) program. Participating along with Mansfield in the program are Bloomsburg State College, Susquehanna University, Bucknell University, Lock Haven State College, Lycoming College, and Williamsport Area Community College.

As a sophomore, junior, or senior, a student will be able to enroll for credit as a full-time student, normally for one term, at any cooperating institution. Each SES college will stipulate which of its courses and programs will be open to SES students. The Office of Academic Affairs at Mansfield in cooperation with the student's major department must approve the courses, programs, and semester hours prior to participating in SES.

A SES student will remain fully enrolled in his/her degree program at Mansfield and will simultaneously enroll on a full-time basis at the host institution according to its definition of full-time enrollment. The student will be subject to the rules and regulations of the host institution while there. It will extend all opportunities and benefits to a SES student that it provides for its own students, such as library, housing, meals, cultural activities, student organizations and activities, except where legal constraints provide otherwise. A SES student will not be eligible for financial aid from any host institution. Housing will be supplied by the host institution on a space-available basis.

SES students will pay instructional fees to Mansfield according to prevailing policies, including charges and deferred payment plans. Applicable non-basic fees, such as room and board charges and student activities fees, will be paid to the host college. Information and application blanks are available in the Office of Academic Affairs.

INTERNSHIP PROGRAM — PENNSYLVANIA STATE GOVERNMENT

Mansfield State College participates in the Life Experience Internship Program which is designed to provide the opportunity for college students to apprentice in government agencies and to combine classroom theory with practical work experience.

Participants are placed in various state agencies for sixteen (16) weeks each semester or nine (9) weeks during the summer. Students remain registered at M.S.C., pay instructional fees, receive from 9-15 semester hours, and are supervised by a college faculty member. The program is available in the summer on a limited basis.

The possibilities of agencies are diverse; more information and application blanks may be obtained from the Office of Academic Affairs.

INTERSHIP PROGRAM — FEDERAL GOVERNMENT

During the summer Federal departments and agencies employ a limited number of students under the Federal Summer Intern Program. Selected students receive practical experience in some phase of Federal activity related to their individual career field. Most intern positions are in the Washington, D.C., metropolitan area, but some may be located in other major cities.

All interns must be United States citizens; they must have completed at least sixty (60) semester hours as of June; and they must be in the upper third of their class. Participants do not receive any academic credit but receive a weekly salary.

Mansfield State College receives information in early March on one or two positions for which the College may select applicants. The Office of Academic Affairs contacts the academic departments whose majors meet the specific job descriptions. However, interested students may also contact that office for information.

SECOND BACCALAUREATE DEGREE

A student who possesses a baccalaureate degree may earn a second bachelor's degree upon completion of the following requirements: (1) a minimum of thirty-two (32) semester hours at Mansfield State College beyond the first degree, (2) completion of all requirements of the major in which the second degree is to be earned, (3) the first degree will be considered to meet the College's general education requirements, except Eng 313, and (4) grade point average on all work attempted toward the second bachelor's degree of at least 2.00, and on all courses in the major of at least 2.00. (Internships, student teaching, and observation/participation semester hours are not counted in the required minimum of thirty-two semester hours.)

SCHOLASTIC STANDARDS AND REQUIREMENTS

Marking and Point System. Mansfield State College employs the 4-point system, as shown below, in evaluating academic performance.

Grade	Interpretation	Quality Points
A	Excellent	4
B	Above Average	3
C	Good College Work	2
D	Passing	1
F	Failure	0

Instructors may correlate percentage scores with letter grades. For such correlation the following list of equivalents is presented.

90 — 100 = A
80 — 89 = B
70 — 79 = C
60 — 69 = D
0 — 59 = F

In addition to letter grades, the following designations (none of which is figured in the Q.P.A.) are used in situations warranting them:

I — Incomplete
S — Satisfactory
U — Unsatisfactory
EX — Credit by Examination
WP — Withdrew passing from the course after the drop-add period with the approval of instructor, the department chairperson, and the Registrar.
WF — Withdrew failing from the courses after the drop-add period with the approval of the instructor, the department chairperson, and the Registrar.
AU — Audited
*PF — Pass-Fail
— denotes a Continuing Education course

The academic standing of each student in every subject is reported at the close of the semester. All regular matriculating students seeking an undergraduate degree must meet the established academic standards of the institution.

The student's quality point average (Q.P.A.) is determined by dividing the total number of quality points earned by the total number of semester hours of work attempted. It should be noted that *semester hours* and *credit hours* are one and the same. The Q.P.A. is the index by which a student's academic standing is judged.

REPEATING GRADES

An "F" grade in a required course must be cleared by repeating the course.

When a student repeats a course which cannot be repeated for credit then 1) all grades received shall be included on the student's transcript, but 2) only the last grade received shall be used in computing the student's quality point average.

Note: Any course may be repeated, not solely courses that were failed. However, the last grade is the one that counts. Therefore, should a student repeat a course in which he or she received a "D" and fails the course the second time, the "F" would be used in computing the student's quality point average and the semester hours earned with the "D" would be erased.

Students who are repeating a course should notify the Registrar's Office.

INCOMPLETE GRADES

An "I" (Incomplete) grade is used to denote unfinished work because of serious mitigating circumstances beyond the student's control. The student is responsible for the removal of an "I" grade within a period of three weeks following the semester in which the "I" grade was given except in cases where further mitigating circumstances prevail.

Decisions about granting the "I" grades will be made by the professor of the course in

consultation with the Registrar's Office. An Incomplete is a privilege granted because of circumstances and not a right to be expected by the student. If the "I" grade is not cleared, the Registrar should record a final grade of "F."

GRADE CHANGES

If an error in computation or transferral requires that a faculty member change the final grade given a student, such a change must be made within the first three weeks of the following semester. *No grade changes will be allowed following that time unless a request for an extension was made by the faculty member to the Registrar.*

CONTINUANCE IN COLLEGE

Students attending Mansfield State College are permitted continued matriculation governed by credits attempted with the corresponding minimum quality point average (Q.P.A.) as required by the outline below.

The grade report issued to students at the end of every marking period serves as the means by which each student is informed of his or her academic standing. Should a student's grade point average be below a cumulative 2.0 he or she will receive a letter of warning from the Office of Academic Affairs. The following schedule shall be the minimum requirement for continuation and satisfactory standing at Mansfield State College.

0-18 semester hours attempted — 1.00 Q.P.A. or better
19-37 semester hours attempted — 1.60 Q.P.A. or better
38-56 semester hours attempted — 1.80 Q.P.A. or better
57 or more semester hours attempted — 2.00 Q.P.A. or better

Any student whose quality point average is below the standard set forth above at the end of the fall or spring semester will be dismissed from college.

Transfer students are not subjected to academic dismissal until they have completed two semesters at Mansfield State College, unless their Q.P.A. at the end of the first semester is less than 1.00. Thereafter, transfer students are subject to the same academic standards. For example, a student who is granted eighteen (18) semester hours of credit in transfer and who is taking fifteen (15) semester hours of work will have attempted a total of thirty-three (33) semester hours at the end of the semester and must earn a Q.P.A. of at least 1.60 to continue.

Readmitted students are subject to the same academic standards.

A one year interval must elapse before a student who has been dismissed for academic deficiency may be readmitted to the college. Students twice dismissed for academic reasons automatically terminate their association with Mansfield State College.

ACADEMIC STANDARDS REVIEW BOARD

Following dismissal notification, a student, upon his own initiative, has recourse to the Academic Standards Review Board if in his or her opinion there would be sufficient reasons upon which to base an appeal for reinstatement before the usual one-year time interval. The Academic Standards Review Board normally meets in June and January.

PROCEDURES — ACADEMIC STANDARDS REVIEW BOARD

A. Upon dismissal, the student (if he or she chooses to appeal) requests an appointment for his or her hearing through the Office of Academic Affairs (normally by calling that office). The Academic Standards Review Board will not hear the appeal of a student who has been dismissed a second time.
B. After having been notified of the time for the hearing, the student is expected to address to the chairperson of the Review Board a written appeal stating his or her case. The written appeal may be mailed to the chairperson or brought in person by the student to the hearing. In no case, however, will the board be obligated to decide an appeal if the student has failed to provide the board with a written statement of his/her appeal.
C. After receiving information with regard to the appointment time and place for his or

her hearing, the student is expected to request his or her departmental chairperson and the faculty member of his or her choice to appear before the Board at the appropriate time. The Board will not hear a student who does not have faculty representation.

D. Before the student discusses his or her case with the Board, the student's written review will be read by the Board. The voting members of the A.S.R.B. will consider all necessary records of the student. Next the student will be given the opportunity to speak to the A.S.R.B.
E. Following the presentation of his appeal, the Board members for the case will vote by secret ballot (example: John Doe — granted or denied) and the student will be notified immediately of the Board's decision.
F. Failure to appear on the part of the student will constitute waiver of the appeal and will result in a finalization of the dismissal. Should the student's chairperson or the faculty member of his or her choice fail to appear, the remaining voting members will have the determining votes. A majority vote of the members will determine the decision on any specific case.
G. If the student's appeal is denied, he or she may initiate an appeal to the president if he or she has new information to present.

STUDENTS IN ACADEMIC DIFFICULTY

Advisors should confer carefully and often with advisees in academic difficulty. Although the responsibility for awareness of his or her academic situation is the student's, the advisor should assist the student in having a clear understanding of his or her potential for dismissal. Assistance with any questions relative to the Continuance Policy is available from the Assistant Vice President for Academic Affairs.

Since credits, not grades, transfer to M.S.C., students in academic difficulty cannot raise their averages by attending summer school at other institutions. Furthermore, it is usually not to the student's advantage to take courses elsewhere because transfer credits raise the student's total number of semester hours, necessitating a higher Q.P.A. as seen in the aforementioned schema.

COURSE LOAD

Class standing is determined by the total number of semester hours earned including acceptable semester hours transferred from other accredited colleges.

Freshman	0-31 semester hours of earned credit
Sophomore	32-63 semester hours of earned credit
Junior	54-95 semester hours of earned credit
Senior	96 semester hours of earned credit

ACADEMIC INTEGRITY

STUDENTS

Faculty members are expected to take reasonable precautions to reduce to a minimum opportunities for dishonesty in academic work. Faculty should instruct the students in the meaning of plagiarism in order to aid in solving the plagiarism problem. Where possible, the faculty member is expected to assess instances of academic dishonesty in the interest of acceptable high standards. This is a matter primarily between the student and the instructor. Requests for special assistance may be made to the Office of Academic Affairs.

The *Password* contains the procedures to be followed to initiate disciplinary action in cases of academic dishonesty.

FACULTY

The faculty has the responsibility to apprise students of course evaluation criteria, to

adhere to such stated criteria and procedures, and to determine grades in a fair and equitable manner.

The procedure set forth below is designed for use in those situations in which a student charges that a faculty member has discharged his or her professional duties in an improper, arbitrary, discriminatory or unjustified manner. Complaints which may be properly considered by means of these procedures include, but are not limited to, complaints about grades and complaints about changes in requirements for a course during the semester.

Complaints about grades may, among other things, be based upon racial, sexual or religious discrimination or other forms of favoritism; arbitrary, capricious or unreasonable methods of evaluation; lack of precautions taken by the instructor against cheating or plagiarism; or unfair penalties for legally recognized absences from class or examination.

PROCEDURE

A. The student should first present the complaint, orally and informally, directly to the faculty member involved.

B. If no agreement is reached at step A, the student may prepare a written complaint which contains supporting evidence and indicates the desired solution. This written complaint must be submitted to the departmental chairperson and the faculty member within twenty regular semester class days of the date on which the student became aware, or should have become aware, of the occurrence leading to the complaint. The faculty member, the student and the chairperson shall meet together to discuss the complaint. The chairperson may conduct whatever informal investigation seems necessary and should attempt to achieve a negotiated settlement. If the complaint is directed against the departmental chairperson, the written complaint must be submitted to the school dean who shall select a senior member of the department to fill the chairperson's role in this procedure.

C. If the student is still unsatisfied, he or she may have a hearing before a committee especially formed for that purpose. The request for such a hearing must be presented to the school dean within five regular semester class days of the meeting required in step B. This request must be accompanied by a copy of the written complaint, which may be redrafted before it is submitted.

D. The committee to hear the complaint shall be composed of three faculty members, two students and the school dean who shall be a non-voting member and shall serve as chairperson. The chairperson shall be responsible for scheduling and conducting committee meetings and for insuring that the procedures described herein are carried out. The three faculty members of the committee shall be chosen by the dean from a list of those recommended by the departmental chairperson. The two student members shall be selected by the Executive Committee of the Student Government Association and the Dean of Students. The committee shall adopt its own rules of procedure, consistent with these guidelines.

E. The student and the faculty member shall each appear before the committee at the same time. Each may be accompanied by a member of the College community to act as an advocate.

F. The student and the faculty member may each present to the committee such witnesses as they feel are desirable.

G. The committee may conduct an investigation and collect evidence. The student and the faculty member must be given this evidence and each afforded an opportunity to rebut it.

H. The faculty member shall make all pertinent materials and grading records available to the committee. The committee may, at its discretion, make available to the student those records, or portions thereof, which it judges to be relevant in light of the student's allegations.

I. The committee shall consider the evidence and make a recommendation to the faculty member as to how the complaint shall be settled. The faculty member should be guided by, but is not bound by, this recommendation.
J. If either party is still dissatisfied, he or she may appeal to the Vice President for Academic Affairs.
K. The vice president shall hear the evidence by each side and may collect further evidence as desirable. Both sides must be given access to such evidence and given the opportunity to rebut it.
L. The vice president shall take whatever action he or she feels necessary to restore equity in the situation, with the provision that a course grade may not be altered to A, B, C, or D, nor may a grade of F be altered to P without the consent of the faculty member who assigned the grade. Any grade may be altered to W and any passing grade may be altered to P without such consent.

ACADEMIC POLICIES

ABSENCE POLICY

Regular and punctual class attendance is expected of all students.

Student evaluation expressed as grades will be determined on the basis of academic performance. Professors will outline their criteria for academic evaluation prior to the end of the first week of class.

Bona fide excuses because of illness, serious mitigating circumstances, or absences because of official College representation approved by the Office of the Vice President for Student Affairs shall be accepted by all faculty.

Requests for absence from the College must be initiated in the Office of the Vice President for Student Affairs and official notification for excused absences will be issued to the faculty by this office.

ADD, DROP, WITHDRAW FROM A COURSE

A student may withdraw from a course during the first nine weeks of a semester without penalty. After nine weeks a "WP" or "WF" will be recorded on the student's record upon official withdrawal from a course. Course withdrawal after the designated nine-week drop period is permitted with the approval of the Registrar, the instructor of the course, and the student's department chairperson. A statement in writing from the student's medical doctor, counselor, or close family must be approved by the Registrar before a student is permitted to complete withdrawal procedures.

A student may add a course during the first two weeks of the semester.

To drop or add a course during the drop-add period, the student secures the appropriate form from the Registrar's Office or faculty, has the form signed by the instructor of the course and by his or her advisor, and returns the form to the Registrar's Office. No notation of a course dropped will appear on the student's permanent record if he or she withdraws during the designated drop period.

A student will receive an "F" in any course from which he or she withdraws without approval.

CHANGE OF MAJOR OR DIVISION

Requests to change major or division must be initiated at the Registrar's Office.

MAINTENANCE OF MATRICULATION

Students, who are teachers-in-service, working toward completion of degree or certification requirements will remain in "continued matriculation" status provided that a minimum of six semester hours of acceptable course work is completed each year. These courses may be taken in residence or as transfer courses.

WITHDRAWAL FROM COLLEGE

Students wishing to withdraw from college must notify the Counseling Center which

provides the student with a form that, when completed, clears the student for formal withdrawal. All financial obligations to the College must be met.

Students wishing to withdraw from the College and erase the semester's work would be instructed by the Counseling Center to date their withdrawal the Friday of the last regular class week (Note: In order for the withdrawal to be effective for the last Friday of regular class week the student must check out of the dormitory on that date). Students wishing to withdraw with the semester's work retained on their record would date their withdrawal the Friday of the last week for combined final exams and classes.

Withdrawal without proper notification and approval may prejudice a student's record and his chance for future readmission. The College reserves the right to record "F" grades for such courses not completed during the semester in which the student has improperly withdrawn.

Students withdrawing with the intention of returning to M.S.C. in a semester or a year may so notify the Office of Academic Affairs which will in turn contact the Admissions Office and the $10.00 readmission fee will be waived. Such notification must be given at the time of withdrawal and is valid for one calendar year unless the student specifies an exact date of re-entry (which may be longer than a calendar year) at the time of withdrawal.

Students readmitted following a break of more than one semester fall under all college policies in effect at the time of readmission.

PASS-FAIL POLICY

A. Eight courses may be taken under the pass/fail option over the total four years. A student may take no more than one course pass/fail each semester.
B. No 100 or 200 level courses taken in fulfillment of core or General Education requirements may be taken pass/fail.
C. Any 100 or 200 level course may be taken pass/fail but will count only as a free elective.
D. Information that any 100 or 200 level course taken pass/fail will count only as a free elective should be included on the pass/fail option card.
E. Courses required by the major department may only be included in the pass/fail option at the discretion of the department.
F. Pass grades will be "D" or better, and three failures under the option will constitute loss of the option. Pass/fail courses are not reflected in the quality point average of the student, but will be counted as semester hours earned if a passing grade is received. The student has a two week period at the beginning of the semester to elect to take a course pass/fail. He may not change his pass/fail option to a letter grade or select the pass/fail option after the two week add period has passed. Any 300 level courses *which are approved as courses for Model V* may be taken pass/fail in fulfillment of General Education.

PETITION

When any rule or regulation of the College causes an unfair hardship, the student is entitled to petition for an exception by filing a petition form obtainable from the office of the student's dean. Advisors are expected to assist in the preparation of a petition. Completed forms should have the necessary signatures prior to submission to the Office of Academic Affairs.

PERMISSION PROCEDURES TO TAKE COURSES AT ANOTHER INSTITUTION

Matriculated students desiring to take courses at another institution for transfer to M.S.C. must complete a "Dean's Recommendation for Transfer of Credit to M.S.C." form prior to undertaking the courses. The form is available at the Office of Academic Affairs, Alumni Hall, Room 103.

If the courses which the student desires to take elsewhere are electives or courses in

the student's major, the form is signed by the student's advisor, department chairperson, and academic dean.

If the courses are to meet General Education requirements, the form is signed by the student's advisor, department chairperson, and the Assistant Vice President for Academic Affairs. For courses to be acceptable for General Education group closing, they must be comparable to courses which may be taken for General Education at M.S.C. Since taking courses at another institution as a means to circumvent the College's General Education program is not desirable, courses are carefully scrutinized.

TRANSCRIPTS

Official transcripts of credits earned on this campus are prepared by the Registrar's Office and issued according to the following policies:

A. Student records are confidential records; transcripts, therefore, are issued only at the written request of the student. Requests by telephone are not acceptable.
B. A student may be issued one free unofficial transcript each semester while in attendance at Mansfield State College. After the first transcript has been issued, a charge of $1.00 is made for each additional transcript. When not enrolled one free transcript will be provided with the same charge of $1.00 for each additional transcript.
C. No transcript is issued to or for a student who is indebted to the College until such indebtedness has been paid in full.
D. Official transcripts of credit earned at other institutions which have been presented for admission or evaluation become a part of the student's permanent record in the Registrar's Office and are not reissued or copied for distribution. Transcripts from other institutions, if needed, must be obtained directly from the institution in question.
E. *No official transcript* will be issued directly to the student. A student may have a transcript of his or her academic record for his or her file, but it will not be signed or bear the seal of the College. A student may be issued one free unofficial transcript each semester while in attendance at M.S.C.

College of Arts and Sciences

The College of Arts and Sciences offers a broad variety of traditional liberal arts programs and pre-professional fields of study. The Faculty of the College make every effort to integrate these two concepts, a reflection of their commitment to a broad-based liberal education.

One element that reflects the integration of these concepts is the Internship options available to almost all students in programs in the College of Arts and Sciences. While internships (also called practicum and pre-professional experience) are traditionally available in such fields as psychology and political science, the College of Arts and Sciences offers such opportunities in almost every department and program. History students have undertaken internships in, for example, museums, and philosophy students in governmental agencies.

Almost every department has a student organization, ranging from national honorary societies to more socially-oriented groups. In each instance, students interested in the field have the opportunity to develop their leadership skills in organizing activities ranging from visiting speakers to annual picnics. Many of the organizations are funded by the Student Government Association, and thus become a part of the total College organizational plan.

Students selecting a specific major will be assigned an academic advisor within the appropriate department, and are encouraged to begin discussions with their advisor as early as possible. Guidance in the selection of required courses is coupled with suggestions for other areas of development, in order both to enrich the student's academic background and to prepare for a career. Those students who have not yet chosen a major (currently, almost 25% of the entering student body) or who seek information about other programs of study may call on the Academic Advising Center, in the Office of the Dean of Educational Services. The Center has available information about all the academic programs and requirements of the College, as well as advisors available at most hours of the week.

All departments in the College encourage extensive student involvement in the academic programs, and students thus serve on most departmental committees. In this way, the Faculty again show their commitment to the total development of the student and to the student's preparation for a career in the working world after graduation.

In conjunction with the School of Professional Studies, the Faculty of Arts and Sciences offer programs of study leading to certification as secondary school teachers.

Allied Health Studies

Associate in Science (A.S.) degrees are offered in Respiratory Therapy and X-Ray Technology through a joint program with the Robert Packer Hospital in Sayre, Pennsylvania. Students in these two-year programs must also complete the appropriate practicum during the intervening summer session. All course and laboratory work is performed at the Hospital; instruction is by both the College and the Hospital faculty and staff.

Students in the Associate degree programs will be required to achieve a 2.0 grade point average in order to graduate, and will be subject to the academic rules and regulations applying at both the College and the Hospital.

The Robert Packer Hospital programs in Respiratory Therapy and X-Ray Technology have been certified by the Council on Medical Education of the American Medical Association. Completion of the A.S. degree programs will prepare students for the appropriate Board examination for certification.

Admission to the program is granted jointly by the College and the Hospital. Application may be made to either institution, as may inquiries seeking further information.

The College also offers the Bachelor of Science degree in Medical Technology; description of this program will be found under the Department of Biology.

Students in both programs must complete the following College courses: Eng. 112; Spc. 101; Psy. 100; an appropriate Math course; an appropriate course in Chemistry or Physics; an appropriate course in the area of social problems; and an appropriate course in the principles of management. Further, the following courses offered by the Hospital faculty must be completed: Biology of Human Systems I and II, and Pathology.

RESPIRATORY THERAPY PROGRAM. The following courses complete the program in Respiratory Therapy: RT I-IV; Physiology of Respiration; Chemistry of Gases and Solutions; Microbiology; Pharmacology; and Clinical Practicum, offered during the summer session. Extensive application of procedures will be developed during the two-year program.

X-RAY TECHNOLOGY PROGRAM. The following courses complete the program in X-Ray Technology: XRT I-IV; X-Ray Physics; Clinical Practicum, offered during the summer session; and Clinical Practice and Evaluation. Extensive application of procedures will be developed during the two-year program.

Bachelor of Arts: General Studies

(Self-designed major)

The Bachelor of Arts: General Studies program allows selected students to design their own major program in close conjunction with a faculty advisor. The degree is offered by Mansfield State College in recognition of the fact that some students enter college with specific academic or career goals that might not be met in one of the existing programs in the College. Additionally, the College recognizes that certain students have attained a level of intellectual maturity that allows them to explore broader areas and prepare such a specialized program.

Students in the program must meet the College's requirements in General Education, as well as all other academic requirements. No major concentration is required, but no student shall take more than 21 semester hours in any single field of study (e.g. Chemistry). Semester hours beyond 21 shall require that the student declare a major in that Department, unless there are special circumstances. All academic rules and regulations of the College shall apply to students in the General Studies program except those pertaining to a major.

With the faculty advisor, the student should prepare a meaningful program. Students should take note that this degree program in General Studies does not necessarily prepare them for a specific career, although a well-designed sequence of courses can lead to such general fields as environmental concerns, area studies, and minority studies.

Department of Biology

Three undergraduate baccalaureate degree programs are offered to the biology major: Bachelor of Arts (B.A.), Bachelor of Science in Education (B.S.E.) and Bachelor of Science — Medical Technology (B.S.M.T.). Common to all three programs is a core of required biology courses which are: Bio 111, 210, 220, plus 2 of 3 options selected from the following: Option A — Bio 330 or 332, Option B — Bio 340, Option C — Bio 355. Medical Technology students take courses from all three options. Courses in chemistry, mathematics and physics are also required.

Students who have taken Bio 101 and subsequently chose biology as a major must complete the core of required courses to the satisfaction of the biology department. To avoid lost time, a student wishing to transfer to Mansfield from other colleges and universities should have completed during the freshman and sophomore year the equivalent of the required courses listed for the biology major.

The biology department offers non-major students an opportunity to pursue studies which will expand and broaden their knowledge and understanding of the biological sciences. Courses of study include Bio 101, 102, 210, 220, 240, and 260.

Bachelor of Arts Program

Recommended Semester Sequence: B.A. Program

First Semester*	S.H.
Chem 111 Gen. Chem. I	4
Ma** 140 Cal. I	3
Bio 111 Intro to Cell Bio	4
Eng 112 Comp I	3
Gen Ed Elective	3
HPE 101	1
	18

Second Semester	S.H.
Chem 112 Gen. Chem. II	4
Ma 141 Cal. II	3
Bio 220 Botany	4
Gen Ed Elective	3
HPE 102	1
	15

Third Semester	
Chem 211 Org Chem I	4
Gen Ed Elective	3
Bio 210 Zoology	4
HPE 100	2
Gen Ed Elective	3
	16

Fourth Semester	
Chem 212 Org Chem I	4
Bio 310 Ecology	3
HPE 201	1
Spc 101 Oral Comm	3
Gen Ed Elective	3
Gen Ed Elective	3
	17

Fifth Semester	
Phys 191 Physics I	4
Bio Elective	3
Gen Ed Elective	3
Bio Elective	3
Eng 313 Comp II	3
	16

Sixth Semester	
Bio Elective	3
Bio Elective	3
Gen Ed Elective	3
Gen Ed Elective	3
Phys 192 Physics II	4
	16

Seventh Semester	
Bio Elective	3
Bio Elective	3
Gen Ed Elective	3
Free Elective	3
Free Elective	3
	15

Eighth Semester	
Bio Elective	3
Bio Elective	3
Bio 404 Seminar	1
Free Elective	3
Free Elective	3
Free Elective	3
	16

* If required, Eng. 090, Math. 090, and/or Ed. El. 090 should be taken the first semester. Three, six, or nine semester hours of courses would be deferred to other semesters. The semester hours earned from these courses do not count towards the 128 semester hours needed for graduation.

** Ma 130 may be taken in the first semester if needed as a remedial course, but the student still must complete Ma 140 and 141 under math option A, or Ma 140, 105 and 107 under option B.

Bachelor of Science in Education Program

The Secondary Education (B.S.E.) program prepares the student to enter the teaching profession with certification in both biology and general science and also to pursue study at the graduate level. The B.S.E. major takes the same basic courses in biology, chemistry, mathematics and physics as those required for the B.A. program. Additional biology electives, courses in professional education and student teaching are necessary for completion of the B.S.E. program.

Recommended Semester Sequence: B.S.E. Program

First Semester*	S.H.	Second Semester	S.H.
Eng 112 Fresh Comp I	3	Ma 141 Anal Geom & Calc II	3
Ma 140 Anal Geom & Calc I	3	Bio 220 Botany	4
Bio 111 Intro Cell Bio	4	Chem 112 Gen Chem II	4
Chem 111 Gen Chem I	4	Ed 211 SEPEP II	1
Ed 111 SEPEP I	1	HPE 102 Phys Ed II	1
HPE 101 Phys Ed I	1	Gen Ed*** Elective	3
	16		16
Third Semester		**Fourth Semester**	
Spc 101 Oral Comm	3	Gen Ed*** Elective	3
Chem 211 Organic Chem I	4	Chem 212 Organic Chem II	4
Ed 311 SEPEP III	1	HPE 100 Health	2
Bio 210 Zoology	4	Ed 411 SEPEP IV	1
Gen Ed*** Elective	3	Bio Elective	3
Gen Ed*** Elective	3	Gen Ed*** Elective	3
		HPE 103 Phys Ed III	1
	18		17
Fifth Semester		**Sixth Semester**	
Eng 313 Comp II	3	Ed** 302 Audio-Visual Comm	2
Phys 191 Physics I	4	Ed** 300 Sec School Methods	3
Psy 100 Gen Psychology	3	Ed 230 Educ Psychology	3
Bio 310 Ecology	3	Ed** 301 Evaluation Techniques	2
Gen Ed*** Elective	3	Bio Elective	3-4
		Phys 192 Physics II	4
	16		17-18
Seventh Semester		**Eighth Semester**	
Ed 401 Hist & Phil of Ed	3	Ed 400 Student Teaching	12
Bio 404 Bio Seminar	1		
Gen Ed Elective	3		
Bio Elective	6		
Gen Ed Elective	3		
	16		12

* If required, Eng. 090, Math. 090, and/or Ed. El. 090 should be taken the first semester. Three, six, or nine semester hours of courses would be deferred to other semesters. The semester hours earned from these courses do not count towards the 28 semester hours needed for graduation.

** Ed 300, 301 and 302 is a block experience that must be completed prior to student teaching. This block experience is offered in the Spring Semester Only.

*** General Education Electives should include 2 courses from Earth & Space Science to qualify for certification in General Science.

Medical Technology Program

The Medical Technology (B.S.M.T.) program provides the student with an opportunity to prepare for a career in Medical Technology. Under this program the student completes three years of pre-professional study at Mansfield State College and one year of clinical study at an approved hospital School of Medical Technology. With some modifications basic requirements are the same as those for the B.A. and Secondary Education programs. Ecology and Biology Seminars are not required. However, Physiology, Genetics and Microbiology are required. Under advisement, the student earns a minimum of 96 credits during the three years at the College. When the student

has successfully met all General Education and pre-professional requirements at the College, he/she is eligible to apply as a candidate for admission to the professional or clinical year of study (50 weeks) at an approved hospital School of Medical Technology. Upon acceptance by the hospital, the student then completes the fourth year of training which includes studies in Microbiology, Chemistry, Clinical Microscopy, Hematology, Serology, Blood Bank, and Histologic Technique for a total of 32 semester hours. When all phases of the program are completed (3 years of pre-professional and 1 year of clinical) the student is awarded the degree Bachelor of Science — Medical Technology by Mansfield State College. Furthermore, the student is now eligible and is expected to take the examination for registration given by the Board of Registry of Medical Technologists of the American Society of Clinical Pathologists.

Recommended Semester Sequence: B.S. Medical Technology Program

First Semester*	**S.H.**	**Second Semester**	**S.H.**
Eng 112 Comp I	3	Spec 101 Oral Comm	3
Chem 111 Gen Chem II	4	Chem 112 Gen Chem I	4
Ma 130 Alg & Trig	3	Bio Elective	1
Bio 111 Intro Cell Bio	4	Ma 140 Calc I	3
HPE 100 Health	2	Gen Ed Elective	3
HPE 101 Phys Ed I	1	Gen Ed Elective	3
	17		17
Third Semester		**Fourth Semester**	
Chem 211 Org Chem I	4	Chem 212 Org Chem II	4
Ma 105 Intro to Stat	3	Bio 332 Gen Physiology	4
HPE 102 Phys Ed II	1	Ma 107 Intro to Comp Prog	3
Psy 100 Gen Psychology	3	Phil 201 Intro to Phil Free Elective	3
Bio 210 Zoology	4	Elective	3
	15		17
Fifth Semester		**Sixth Semester**	
Chem 311 Quant Anal	4	Gen Ed Elective	3
Eng 313 Comp II	3	Bio 355 Microbiology	3
HPE 203 Phys Ed III	1	Bio 380 Immunology	3
Phys 191 Physics	4	Electives	6
Bio 340 Genetics	3		
	15		15
4th Year (clinical year at hospital)		**4th Year (for Liberal Arts)****	
Microbiology (Clinical)	8	Phys 192 Physics II	4
Clinical Microscopy	3	Bio 404 Seminar	1
Clinical Chemistry	8	Biology & Free Electives	27
Hematology	8		
Serology	4		
Histological Techniques	1		
	32		32

* If required, Eng. 090, Math. 090, and/or Ed. El. 090 should be taken the first semester. Three, six, or nine semester hours of courses would be deferred to other semesters. The semester hours earned from these courses do not count towards the 128 semester hours needed for graduation.

** If a student decides to change curriculum or is not accepted by a hospital School of Medical Technology, he may complete the fourth year at the college as indicated and receive the B.A. degree in Biology. The reason for the above option is that the Biology Department cannot guarantee acceptance to any hospital School of Medical Technology.

Fish Culture Program

A two year program leading to the Associate of Science in Fish Culture is also housed in the biology department. The program is designed to give the student the generalized and specialized knowledge necessary to pursue a career in the field of fish culture. His role in that field is a technical one and consists of such activities as preparing diets for hatchery fish, monitoring water quality in hatcheries and potential stocking sites, diagnosing and treating the common ailments of hatchery fish, and collecting and analyzing routine experimental results under the supervision of an ichthyologist or hatchery manager. Fish Culture technicians normally find employment with governmental agencies concerned with sport fishing and increasingly with private corporations raising fish commercially. With the future world supply of food and particularly protein in question, the field of fish culture promises to become increasingly important as a supplier of foodstuffs. The program includes a placement service to aid graduates in finding the most favorable employment.

The elements of the program include basic skills in writing and mathematics, basic biology and chemistry, specialized courses in biology and fish culture and practical field experience gained through the Practicum in Fish Culture. Because the degree requires intensive training in specific fields and because of the cumulative development of competencies, students are neither allowed to substitute courses nor to take them out of sequence. Courses unique to the program and not open to students from other programs include BFC 213-218. In addition, students are required to participate in fish culture seminars.

Recommended Semester Sequence: Associate of Science in Fish Culture

First Semester*	S.H.	Second Semester	S.H.
Bio 210 Zoology	4	Bio 360 Ichthyology	3
BFC 213 Fish Culture I	3	Bio 220 Botany	4
Eng 112 Composition I	3	Chem 102 Organic & BioChem	4
Ma 105 Intro to Stat	3	Bio 355 Microbiology	3
Chem 101 Intro Chem	4	BFC 214 Fish Culture II	3
	17		17
Third Semester		**Fourth Semester**	
Spc 101 Oral Comm.	3	Bio 404** Seminar	1
Ma Math Elective chosen under advisement	3	BFC 216** Nutrition of Fishes	2
		BFC 217** Fish Management	2
Bio 362 Limnology	3	BFC 218** Literature Review & Reports	1
BFC 215 Fish Pathology	2		
Bio 497 Independent Study (in Fish Culture)	2	Bio 450*** Practicum in Biology (at hatchery)	10
Bio 340 Genetics	3		
	16		16

Semester Hours Required for A.S. Degree 66

* If remedial English (090) is required the student must make up this deficiency prior to acceptance in the program

** Taught in first 7 weeks of semester

*** Last 8 weeks of semester

Department of Chemistry

The Chemistry Department offers both the B.S.E. degree for teacher certification and the B.S. degree for the professional chemist.

The B.S. program provides the necessary qualifications for a professional chemist and/or further graduate programs leading to the M.S. and Ph.D. degrees. The B.S.

program also provides sound and adequate preparation for areas such as medicine, dentistry, optometry, patent law and other professions. The program is structured to meet the minimum standards as outlined by The American Chemical Society.

The B.S.E. program is designed for those students planning to become teachers at the secondary education level. The teacher training portion of the B.S.E. program is supervised by the Department of Secondary Education.

All prospective chemistry majors should have, or obtain the first semester, the equivalent of high school algebra and trigonometry.

Both degree programs include the following courses: Chem. 112; Chem. 211, 212; Chem. 311; Chem. 321, 322; Chem. 332 and Chem. 410 (two semesters); Math. 140, 141, 240 plus Math. 130 or a mathematics elective; Physics 188 and 211.

Additional courses in the upper divisional level required for the B.S. degree are: Chem. 420 and Chem. 431 plus two electives in Chemistry exclusive of Chem. 490 or Chem. 497 plus electives in related fields.

One upper level elective is required in the B.S.E. program.

Recommended Semester Sequence: Bachelor of Science

First Semester*	**S.H.**	**Second Semester**	**S.H.**
Chem 111, Gen Chem I	4	Chem 112, Gen Chem II	4
Math 130, Alg & Trig or Ma 140, Calc I	3	Math 140, Calc I, or Math 141, Calc II	3
Speech 101	3	Electives, G.E.	6
English 112, Comp II	3	Physical Ed.	1
Elective, G.E.	3	Elective	3
Health & P.E.	2		
	18		17
Third Semester		**Fourth Semester**	
Chem 211, Organic I	4	Chem 212, Organic II	4
Math 141, Calc II, or Math 240, Calc III	3	Math 240, Calc III, or Elective (open)	3
Physics 188, Gen Phys I	4	Physics 212, Gen Phys II	4
Electives G.E.	6	Elective, G.E.	3
Physical Ed.	1	Physical Ed.	1
	18		15
Fifth Semester		**Sixth Semester**	
Chem 311, Quant	4	Chem 322, Phys Chem II	4
Chem 321, Phys Chem I	4	Chem 322, Instrumental**	3
English 313, Comp III	3	Chem Elective**	3
Electives**	6	Electives**	6
	17		16
Seventh Semester		**Eighth Semester**	
Chem 410, Seminar	1	Chem 410, Seminar	1
Chem 420, Qual Organic**	3	Chem 431, Adv Inorganic**	4
Chem Elective**	3	Chem Elective**	3
Electives**	8	Electives**	6
	15		14

* If required, Eng. 090, Math. 090, and/or Ed. El. 090 should be taken the first semester. Three, six, or nine semester hours of courses would be deferred to other semesters. The semester hours earned from these courses do not count towards the 128 semester hours needed for graduation.

** Variable Due to cycling of courses

Recommended Semester Sequence: Bachelor of Science in Education

First Semester*	S.H.	Second Semester	S.H.
MA 140 Anal Geo Calc I	3	MA 141 Anal Geo Calc II	3
Chem 111 Gen Chem I	4	Chem 112 Gen Chem II	4
Ed 111 SEPEP I	1	Ed 211 SEPEP II	1
Spc 101 Speech Fundamentals	3	Educ 200	3
HPE 100 Health	2	Gen Ed Elective	3
Gen Ed Elective	3	HPE 101 Phys Ed	1
	16		15
Third Semester		**Fourth Semester**	
MA 240 Anal Geo Calc III	3	MA Elective	3
Chem 211 Organic Chem I	4	Chem 212 Organic Chem II	4
Psy 100 Gen Psy	3	Phys 211 Gen Physics II	4
Phys 188	4	Ed 411 SEPEP IV	1
HPE 102 Phys Ed (2)	2	Ed Psych 230	3
Ed 311 SEPEP III	1	Gen Ed Elective	3
	18		18
Fifth Semester		**Sixth Semester**	
Chem 311 Quant Analysis	4	Ed 300 Sec School Methods	3
Chem 321 Phys Chem I	4	Ed 301 Eval Techniques	2
Eng 313	3	Ed 302 Audio Visual Comm	2
Electives	6	Chem 332 Instrumental Analysis	3
		Chem 410 Seminar	1
		Chem 322 Phys Chem II	4
		Elective	3
	17		18
Seventh Semester		**Eighth Semester**	
Chem 410 Chemistry Seminar	1	Ed 400 Student Teaching	12
Ed 401 Hist & Phil of Ed	3		
Chem Elective	3(4)		
Electives	6		
	13(14)		

* If required, Eng. 090, Math. 090, and/or Ed. El. 090 should be taken the first semester. Three, six, or nine semester hours of courses would be deferred to other semesters. The semester hours earned from these courses do not count towards the 128 semester hours needed for graduation.

Department of English

The Department of English teaches students to communicate feelings and ideas in an organized manner through the exact use of language; it enables them to read imaginative and intellectual texts with mature understanding and sensitivity. It familiarizes them with modern and traditional grammar, the history of the language, and the scope and continuity of English and American literature. It offers special series of courses in journalism and creative writing. The fact that the Department publishes a national literary magazine, THE FALCON, creates a favorable climate for the teaching of writing.

Programs in English are of two kinds: (a) a program leading to the Bachelor of Science in Education degree and to certification for teaching in the public schools and (b) a program leading to the Bachelor of Arts degree. The latter, Bachelor of Arts major offers a suitable preprofessional training for careers in law, medicine, and business. It is specific preparation, further, for careers in editing, technical writing, advertising, and other forms of communication employed in commerce and the mass media.

MAJOR: Thirty-six hours beyond Eng. 112 are required of all English majors. The following courses must be included in the program of a student preparing to teach in the secondary schools: Eng 200, 201, 202, 203, 225, 226, 235, and either 358 or 359. Except for Eng 225 and 226, the same courses must be included in the program of a student working toward the Bachelor of Arts degree. Literature courses at the 200 level (and Eng 290, 291 and Eng 230, Practical Writing) may not be counted as English electives for a major or minor.

All English majors must achieve second-year proficiency in a foreign language. Speech 200 and 400 are required of students preparing to teach in the secondary schools.

By the end of the sophomore year an English major should have completed Eng 200, 201, 225 and one English elective. Transfer students must satisfy all Departmental requirements.

Eighteen hours beyond Eng 112 are required of students completing a minor emphasis in English. The folllowing should be included: Eng 200, 201, and either 202 or 203.

Recommended Semester Sequence: English B.S.E.

First Semester*	**S.H.**
HPE 100 Health	2
HPE 101 Physical Education I	1
SPC 101 Oral Communication	3
ENG 112 Composition I	3
PSY 100 General Psychology	3
Foreign Language	3
	15

Second Semester	**S.H.**
HPE 102 Physical Education II	1
ENG 225 Grammar	3
ED 111 SEPEP I	1
Foreign Language	3
Gen Ed/Electives	10
	18

Third Semester	
HPE 203 Physical Ed III	1
ENG 200 Survey Eng Lit I	3
ENG 202 Survey Am Lit I	3
ED 211 SEPEP II	1
Foreign Language	3
Gen Ed/Electives	6
	17

Fourth Semester	
ENG 201 Survey Eng Lit II	3
ENG 203 Survey American Lit II	3
Foreign Language	3
Gen Ed/Electives	6
	15

Fifth Semester	
SPC 200 Oral Interpretation	3
ENG 313 Composition II	3
ENG 226 History of Eng Lang	3
Eng Elective	3
Gen Ed/Elective	3
	15

Sixth Semester	
ENG 358 Shakespeare or ENG 359	3
ENG 300 Teaching English	3
Eng Electives	6
Gen Ed/Elective	3
Professional Course	3
	18

Seventh Semester	
SPC 400 Communication Theory	3
ENG 333 Adv Composition	3
Eng Elective	3
Professional Courses	9
	18

Eighth Semester	
ED 400 Student Teaching	12
	12

* If required, Eng. 090, Math. 090, and/or Ed. El. 090 should be taken the first semester. Three, six, or nine semester hours of courses would be deferred to other semesters. The semester hours earned from these courses do not count towards the 128 semester hours needed for graduation.

Recommended Semester Sequence: English B.A.

First Semester*	S.H.	Second Semester	S.H.
HEP 100 Health	2	HPE 102 Phys Ed II	1
HPE 101 Phys Ed	1	ENG 112 Comp I	3
SPC 101 Oral Comm	3	Foreign Language	3
Foreign Language	3	Gen Ed	9
Gen Ed	6		
	15		16
Third Semester		**Fourth Semester**	
HPE 203 Phys Ed	1	ENG 201 Survey Eng Lit II	3
ENG 200 Survey Eng Lit I	3	ENG 203 Survey Am Lit II	3
ENG 202 Survey Am Lit I	3	Foreign Language	3
Foreign Language	3	Gen Ed	9
Gen Ed	6		
	16		18
Fifth Semester		**Sixth Semester**	
ENG 313 Comp II	3	Eng Electives	6
ENG 358 Shakespeare or ENG 359	3	Electives	12
Eng Elective	3		
Electives	6		
	15		18
Seventh Semester		**Eighth Semester**	
ENG 333 Adv Comp	3	Eng Electives	6
Eng Elective	3	Electives	9
Electives	9		
	15		15

* If required, Eng. 090, Math. 090, and/or Ed. El. 090 should be taken the first semester. Three, six, or nine semester hours of courses would be deferred to other semesters. The semester hours earned from these courses do not count towards the 128 semester hours needed for graduation.

Department of Foreign Languages

The Department of Foreign Languages provides instruction to meet the needs of students who wish to build a liberal education around the study of a foreign language and its culture; develop language competence for comprehension, speaking, reading and writing; teach in public or private schools; prepare for graduate study; enter the federal government services, private business, non-governmental organizations, and other areas requiring knowledge of a foreign language.

Requirements for the language major are: Intermediate (French, German, Spanish 201, 202) (qualified students may substitute more advanced courses for 201, 202); Phonetics and Pronunciation (205); Conversation and Civilization (French 300, German 300, Spanish 210 and 306 or 307); Advanced Structure (320); and Survey of Literature (330, 331). Remaining courses are to be taken in electives of the same language to bring the total accumulation to the minimum requirement of 30 credit hours in the chosen language field.

Additionally, or in lieu of a portion of the major program, foreign study can be

arranged. Foreign study is open to students who wish to continue the study of the language abroad. Plans for study should be presented at least two semesters prior to departure and should be approved by the department chairperson. The number of credits granted will be based upon validated credentials presented to the department, and students should register for French, German or Spanish 370-380 prior to departure. Regular periodic reports must be made during the student's residence abroad.

Recommended Semester Sequence: French, German or Spanish B.A.

First Semester*	**S.H.**
Eng 090 or 112	3
Fr Ger or Span 201 Intermediate I	3
SPC 101 Oral Communication	3
Hist 101 Western Civilization I	3
Art 101 Introduction to Art	3
HPE 101 Physical Education	1
	16

Second Semester	**S.H.**
Eng 112 Composition I	3
Fr Ger or Span 202 Intermediate II	3
Fr 205 Phonetics & Pronunciation	1
Hist 102 Western Civilization II	3
Mus 100 Introduction to Music	3
HPE 102 Physical Education	1
General Education Group Requirement	3
	17

Third Semester	
Fr 320 Advanced Fr Structure	3
Fr 331 Survey French Literature II or	3
Ger 300 Conversation	3
Ger 205 Phonetics & Pronunciation or	1
Span 210 Conversation	3
Span 205 Phonetics	1
Span 330 Survey of Spanish Lit I	3
Eng 210 Lit of Western World I	3
Psy 100 General Psychology	3
HPE 203 Physical Education	1
General Education Group Requirements	3-6
	16-17

Fourth Semester	
Fr 300 Conversation & Civilization	3
Fr 330 Survey French Literature I or	3
Ger 330 or 331 Survey German Lit	3
Ger 320 Adv Ger Struct (or 6th sem) or	3
Span 307 Culture & Civ of Latin America	3
Span 331 Survey of Spanish Lit II	3
Eng 211 Lit of Western World II	3
HPE 100 Health	2
General Education Group Requirements	6
	17

Fifth Semester	
French electives or	6
German electives or	6
Span 320 Advanced Span Structure	3
Spanish elective	3
Eng 313 Composition II	3
Requirements or electives	8
	17

Sixth Semester	
French electives or	6
Ger 330 or 331 Survey German Lit	3
German elective or	3
Spanish electives	6
Requirements or electives	10
	16

Seventh Semester	
Requirements or electives	15-18

Eighth Semester	
Requirements or electives	15-17

* If required, Eng. 090, Math. 090, and/or Ed. El. 090 should be taken the first semester. Three, six, or nine semester hours of courses would be deferred to other semesters. The semester hours earned from these courses do not count towards the 128 semester hours needed for graduation.

Department of History

Bachelor of Arts

The history Bachelor of Arts program is designed to provide the undergraduate with a full understanding of the methods and concepts of historical investigation, an acquaintance with the various schools of historical interpretation and an appreciation for the lessons of the past. For a student who excels, a bachelor of arts history degree opens a variety of career possibilities. It is the preferred first degree for those ultimately intending to seek employment as a professor of history on the college level, as the curator of a museum, or as an historian in a governmental agency. It also serves as an excellent preparation for those wishing to attend law school, to enter certain business programs, to pursue a career in government, or simply to serve as a more enlightened citizen.

Social Studies Comprehensive — History Emphasis

The Bachelor of Science program entitled Social Studies Comprehensive — History Emphasis is designed to prepare an undergraduate to teach on the secondary level. It is structured to give the student both a broad familiarity with social studies, a more intensive preparation in history, and courses in professional education.

Requirements for the Bachelor of Arts degree in history: A total of 33-36 semester hours in history is required for a history major. During the first four semesters the potential history major is advised to include Hist. 101 and/or Hist. 102 and Hist. 201 and/or Hist. 202 in his schedule since at least one course from each group will be required to fulfill the major. The history major must also take History 300, Historiography, in his junior year. The history major requires a minimum of 18 semester hours of upper-division history courses but no more than 12 semester hours should be in any one of the following areas: American, European, or Latin American. In addition, 3 semester hours are required in Third World History or Third World Social Science courses (anthropology, geography, or political science). Also required are 12 semester hours selected from course offerings in the social sciences (anthropology, economics, geography, political science, psychology or sociology). A seminar, History 496, is required in either the Junior or Senior year.

For the Bachelor of Science in Education social studies comprehensive-history emphasis, the following departmentally required courses must be completed: Hist. 101, 102, 201 and 202. Upper-division courses required for the Bachelor of Science in Education include: Hist. 300, taken in the junior year, Hist. 306 or 307 and one upper-division course in United State History, one in Third World (the emerging nations or Asia, Africa, the Middle and Near East or Latin America), and one in Third World History or Third World Anthropology, geography, or political science and one free history elective. A total of 33-36 semester hours of history is required to fulfill the Bachelor of Science in Education social studies-history emphasis. In addition, the student must take 21 semester hours in the social sciences; 12 semester hours are required such as anthropology or sociology, human geography; 9 semester hours are free electives with no more than 6 in any one discipline. Certification requirements are presently under review and are subject to change.

Semester Sequence: History Bachelor of Arts

First Semester*	S.H.	Second Semester	S.H.
HIST 101/102 (Semester I or II)	3	HIST 101/102	3
HPE 101	1	ENG 112	3
HPE 100	2	HPE 102	1
SPC 101	3	General Education	9
General Education	6		
	15		16

Third Semester	S.H.
HIST 201/202 (Semester III or IV)	3
General Education	12
HPE 203	1
	16

Fourth Semester	S.H.
HIST 201/202	3
General Education	12
	15

Fifth Semester	
HIST 300	3
Third World History	3
American History	3
Electives	6
	15

Sixth Semester	
Third World History	3
European History	3
American History	3
Electives	9
	18

Seventh Semester	
HIST 496 (Semester VII or VIII)	3
History Electives	3
Electives	9/12
	15

Eighth Semester	
HIST 496 (Semester VII or VIII)	3
History Electives	6
Electives	12/15
	18

* If required, Eng. 090, Math. 090, and/or Ed. El. 090 should be taken the first semester. Three, six, or nine semester hours of courses would be deferred to other semesters. The semester hours earned from these courses do not count towards the 128 semester hours needed for graduation.

Department of Mathematics

The Department of Mathematics offers two undergraduate programs in mathematics. The Bachelor of Arts (B.A.) program in mathematics is designed to prepare the student for mathematics positions in business, industry and for graduate work in mathematics or related fields. The Secondary Education (B.S.E.) program in mathematics provides strong preparation in mathematics to enable the student to enter the teaching profession and to study mathematics at the graduate level.

In cooperation with the Department of Business, Economics, and Computer Science, the Department of Mathematics offers the Bachelor of Science (B.S.) in Computer Science.

A student wishing to transfer to Mansfield from another college should take the equivalent of as many as possible of the following courses during his freshman and sophomore years: MA 141, 142, 160, 241, 242, 260, and 280. If a transfer student has completed 12 credits of calculus and 3 additional credits of mathematics at the calculus level or above, he can proceed through the mathematics program at M.S.C. without loss of time.

If preparation in algebra and trigonometry is not adequate to permit the student to proceed immediately to MA 141 Calculus 1, he must complete MA 130 Algebra and Trigonometry in addition to the courses listed in the required courses for the major.

B.A. Mathematics Major

Students enrolled in the Bachelor of Arts in Mathematics program develop considerable depth of understanding in mathematics and are prepared to pursue graduate study in mathematics or related areas. Within this program it is possible to take extensive course work in the natural sciences, computer science, and in the social and behavioral sciences.

Opportunities available to graduates with a major in mathematics include positions in teaching, computer programming, government work, business and industry. Students are encouraged to continue their training at the graduate level.

Computer Science

By making appropriate use of his elective hours, a student majoring in mathematics may emphasize computer science. Such a student should elect the following courses:

CIS 301 Data Structures
MA 310 Numerical Analysis
MA 480 Operations Research
CIS 325 Operating and Programming Systems
CIS 335 Assembly Language Programming

Other appropriate courses may be elected from the following:

CIS 105 Programming and Information Processing
CIS 110 Principals of Accounting I
CIS 111 Principals of Accounting II
CIS 205 Introdution to File Processing
MA 311 Differential Equations I
MA 312 Differential Equations II
MA 324 Applied Mathematics

Recommended Semester Sequence: B.A. Mathematics Major

First Semester*	S.H.	Second Semester*	S.H.
Eng 112 Composition I	3	HPE 102 Phys Ed II	1
SPC 101 Oral Communication	3	MA 141 Calculus II	3
HPE 100 Health	2	MA 160 Intro Applied Math	3
HPE 101 Phys Ed I	1	Phy 188 Gen. Phy. I	4
MA 140 Calculus I	3	Electives	6
Electives	6		
	18		17

Third Semester	S.H.
MA 240 Calculus III	3
MA 260 Discrete Structures	3
HPE 201 Phys. Ed. III	1
PHY 211 Gen. Phy. II	4
Electives	6
	18

Fourth Semester	S.H.
MA 241 Calculus IV	3
MA 280 Linear Algebra	3
Electives	10
	17

Fifth Semester	
Eng 313 Composition II	3
Math Electives	6
Electives	6
	15

Sixth Semester	
Math Electives	6
Electives	9
	15

Seventh Semester	
Math Electives	6
Electives	9
	15

Eighth Semester	
Math Electives	3
Electives	12
	15

* If required, Eng. 090, Math. 090, and/or Ed. El. 090 should be taken the first semester. Three, six, or nine semester hours of courses would be deferred to other semesters. The semester hours earned from these courses do not count towards the 128 semester hours needed for graduation.

B.S.E. Mathematics Major

The Mathematics Department offers a sequence of courses leading to the B.S.E. degree for those students desiring to enter the teaching profession. The courses offered in the B.S.E. degree program are mathematically sophisticated and are also generally open to students pursuing the B.A. degree. These courses are designed to (1) provide preparation for teaching of all courses in the modern high school mathematics curriculum, (2) enable the student to develop basic understanding in many facets of mathematics, (3) provide adequate background in the "main stream" of contemporary mathematics so that the student can further explore areas of his own interest, and (4) provide the background necessary for the study of mathematics at the graduate level. In short, students who complete the teacher education major at M.S.C. are equipped to provide leadership in the teaching profession and to enjoy success in further study of mathematics in graduate schools commensurate with their abilities and interests.

Recommended Sequence: B.S.E. Mathematics Major

First Semester*	S.H.
Eng 112 Composition I	3
SPC 101 Oral Communication	3
HPE 101 Phys. Ed. I	1
MA 140 Calculus I	3
Psy 100 Gen Psy	3
ED 111 SEPEP 1	1
Elective	3
	17

Second Semester	S.H.
HPE 102 Phys. Ed II	1
MA 141 Calculus II	3
MA 160 Intro to Appl Math	3
Phy 188 Gen. Phy. I	4
HPE 100 Health	2
Elective	3
	16

Third Semester	
MA 240 Calculus III	3
MA 260 Discrete Structures	3
HPE 203 Phys Ed III	1
Phy 211 Gen Phy II	4
ED 211 SEPEP 2	1
Electives	6
	18

Fourth Semester	
MA 241 Calculus IV	3
MA 280 Linear Algebra	3
Psy 230 Ed Psy	3
Electives	9
	18

Fifth Semester	S.H.
MA 329 Modern Geometry I	3
ED 300 Tch Math Sec Schl	3
ED 201 Eval Tech	2
ED 302 Audio Visual	2
ENG 313 Composition II	3
Math Elective	3
	16

Sixth Semester	S.H.
MA 304 Hist Phil Math	3
MA 361 Modern Algebra I	3
ED 311 SEPEP 3	1
ED 401 Hist Phil Ed	3
Math Elective	3
Elective	3
	16

Seventh Semester	
ED 411 SEPEP 4	1
Math Electives	6
Electives	8
	15

Eighth Semester	
ED 400 Student Teaching	12
	12

The first and second semesters of the senior year may be interchanged.

* If required, Eng. 090, Math. 090, and/or Ed. El. 090 should be taken the first semester. Three, six, or nine semester hours of courses would be deferred to other semesters. The semester hours earned from these courses do not count towards the 128 semester hours needed for graduation.

B.S. in Computer and Information Sciences

Emphasis: Computer Science

The Department of Mathematics, in cooperation with the Department of Business, Economics, and Computer Science, offers a program in computer science. The intent of the computer science program is the development of an understanding of the nature of computers and the ways in which they are used. A student majoring in this program will acquire deeper understandings of the various systems of which we are a part: physical systems, natural systems, economic systems, social systems, mathematical systems, environmental systems, etc. The student becomes involved in the mathematical modeling of systems and the statistical analysis of the data of the system.

Recommended Sequence: B.S. in Computer Science and Information Sciences
Emphasis: Computer Science

First Semester*	S.H.
ENG 112 Composition I	3
SPC 101 Oral Communication	3
HPE 100 Health	2
HPE 101 Phys Ed I	1
CIS 104 Intro Comp Science	3
MA 140 Calculus I	3
Elective	3
	18

Second Semester	S.H.
HPE 102 Phys Ed II	1
CIS 105 Prog & Infor Proc	3
MA 141 Calculus II	3
MA 160 Intro to Appl Math	3
Phy 188 Gen Physics I	4
Elective	3
	17

Third Semester	
CIS 205 Intro to File Proc	3
MA 240 Calculus II	3
MA 260 Discrete Structures	3
Phy 211 General Physics II	4
HPE 201 Phys Ed III	1
Elective	3
	17

Fourth Semester	
CIS 230 Lang & Struc of Comp	3
MA 241 Calculus IV	3
MA 280 Linear Algebra	3
Electives	7
	16

Fifth Semester	
CIS 301 Data Structures	3
MA 310 Numerical Analysis	3
ECON 101 American Econ: Macro or 102 American Econ: Micro	3
ENG 313 Composition II	3
Elective	3
	15

Sixth Semester	
CIS 325 Oper & Prog Systems	3
CIS 335 Assembly Lang Prog	3
ECON 101 American Econ: Macro or 102 American Econ: Micro	6
Electives	6
	15

Seventh Semester	
CIS 430 Org of Prog Lang	3
MA 313 App Prob & Stat	3
Electives	9
	15

Eighth Semester	
CIS 480 Operations Research	3
Electives	12
	15

* If required, Eng. 090, Math. 090, and/or Ed. El. 090 should be taken the first semester. Three, six, or nine semester hours of courses would be deferred to other semesters. The semester hours earned from these courses do not count towards the 128 semester hours needed for graduation.

Department of Philosophy

In a technologically oriented world, an enlightened society requires more than impressive machines to achieve the good life. It requires people whose powers of reasoning enable them to make intelligent and sensitive choices about their lives. Philosophy is geared to address such needs. Philosophy is neither a body of established facts nor a group of dogmatic truths, but a method of reasoning logically and critically about the basic beliefs which make up the world. Through an examination of traditional and contemporary philosophical ideas, philosophy helps the student develop an appreciation for such a method and for its application to the problems of his own complex life.

The Department of Philosophy currently offers a major program leading to the B.A. degree in philosophy. It offers a sound foundation for graduate studies both in philosophy and in other professions, especially law, business, and management, as well as in any career program interested in individuals who can think logically (e.g. computer science). A B.A. degree in philosophy also offers an excellent basis for students interested in religious studies and the ministry.

The major program requires 30 semester hours of philosophy courses beyond Philosophy 201. Required in these 30 hours are Philosophy 420, 422, and 423. Any other philosophy courses will satisfy the remaining hour requirements. Majors considering graduate studies in philosophy are strongly advised to acquire elementary reading facility in French or German. It is also suggested that majors take related courses outside the department pertaining to their specific areas of philosophy interest. A non-major emphasis in philosophy consists in any combination of 15 hours in philosophy.

Recommended Semester Sequence

One of the many strengths of the philosophy program is its flexibility. Majors can tailor-make their course of studies according to their needs and interests. Within the major, however, students are required to complete their general education requirements within the first two years of study. Speech 101 and English 112 are to be taken in the freshman year; and English 313, in the junior year.

Philosophy 201, introduction to philosophy, or Philosophy 230, introduction to logic, normally should be taken as a basis for all other philosophy courses. The sequence in the history of philosophy (Phil. 420, 422, and 423) should be taken only after students have acquired facility in the discipline, normally during their junior and senior years.

Department of Physics
Physics — Physics/Pre-Engineering

The Department of Physics offers six degree programs in physics and the earth space sciences. The degrees for teacher certification, B.S.E., are Physics, Physics/Math and Earth Space Sciences (see description under Earth Space Sciences). The programs leading to a bachelor of arts degree, B.A., are Physics, Physics/Pre-engineering and Earth Space Sciences (see Earth Space Sciences).

The B.S.E. programs are designed for those students planning to become teachers at the junior and senior high school level. The teacher training portion of the B.S.E. programs is supervised by the Department of Secondary Education. The B.S.E. major takes the same courses in science and math during the first two years as those required by the B.A. program. It is recommended that students take at least 2 courses in all science disciplines as well as math and receive general science certification.

THE BACHELOR OF ARTS program in Physics is designed around a core curriculum of required physics and mathematics courses. Additional requirements depend on the career orientation of the individual. With this broad liberal arts education, physics majors can continue their education in such areas as bio-physics, operations research, technical sales and marketing, oceanography, industrial and federal management and, of course, the research physicist of the Masters and Ph.D. level.

For students intending to pursue graduate work in physics, it is advisable to take additional courses in physics and mathematics beyond the minimum requirements. Students intending to pursue careers in physics-related professions should select electives that will best prepare them for their chosen careers.

PRE-ENGINEERING combines a liberal arts education in the physics department with a technological education at one of the cooperating engineering universities. The first three years of pre-engineering courses are completed in the physics department and the

last two years at one of the cooperating institutions. The student earns two degrees: a B.A. from M.S.C. and a B.S. from the cooperating school.

This program allows students, whose decision between engineering and science is not yet made, to find their appropriate aptitude without any loss of college time. It also provides a liberal arts program that assures qualified students acceptance into an engineering school when applications may exceed capacity.

Students successfully completing the first 3 years in the physics department may choose among the following degree programs at the cooperating engineering institution: aerospace, agriculture, ceramic, civil, chemical, electrical, environmental, industrial, mechanical, metallurgical, mining, nuclear, petroleum and natural gas or engineering science.

Recommended Lower Division Course Sequence: B.S.E. Physics, Physics/Math B.A. Physics, Physics/Pre-Engineering

First Semester*	**S.H.**	**Second Semester**	**S.H.**
Chem 111 Gen Chem I	4	Chem 112 Gen Chem II	4
Math 140 Calculus I	3	Math 141 Calculus II	3
Eng 112 Composition I	3	SPC 101 Oral Communication	3
HPE 100 Health	2	Phys 188 Gen Phys I	4
HPE 101 Phys Educ	1	Electives**	3
Electives**	3		
	16		17
Third Semester		**Fourth Semester**	
Phys 211 Gen Phys II	4	Phys 212 Gen Phys III	4
Math 240 Calculus III	3	Math 241 Calculus IV	3
Math 160 Intro Appl Math	3	Math 280 Linear Algebra	3
HPE 101 Phys Educ	1	HPE 101 Phys Educ	1
Electives**	6	Electives**	6
	17		17

* If required, Eng. 090, Math. 090, and/or Ed. El. 090 should be taken the first semester. Three, six, or nine semester hours of courses would be deferred to other semesters. The semester hours earned from these courses do not count towards the 128 semester hours needed for graduation.

**1. pre-engineers select general education requirements that simultaneously satisfy both MSC and the cooperating school
2. B.S.E. (secondary school teachers) participate in the SEPEP program

Additional Major Requirements

1. B.A. Physics
   Phys 311, 312, 314, 316, plus 5 elective physics courses at 300/400 level
   MA — 311 plus 1 advanced math course (usually MA 312)
2. B.A. Physics/Pre-engineering
   Phys 311, 312, 313, 315, 316
   MA — 311, 312
   Additional courses at MSC depend on which engineering program the student selects
3. B.S.E. Physics
   Phys 311, 315, 316 plus at least 1 additional 300/400 level physics course
   A total of 29 credits including student teaching will be taken in the education area
4. B.S.E. Physics/Math
   Phys 311, 315, 316 plus at least 1 additional 300/400 level physics course
   MA — 260, 329, 361
   A total of 29 credits including student teaching will be taken in the education area

Earth-Space Science

The Physics Department offers two undergraduate programs in earth-space sciences. The Bachelor of Arts (B.A.) program is designed to prepare the student for graduate work or for employment in industry or government. The Bachelor of Science in Education (B.S.E.) program provides a strong preparation in the earth-space sciences for the teaching of junior and senior high school.

Two options exist within the B.A. program: 1) the four year program at Mansfield and 2) the 3-2 engineering program. In the 3-2 program the student completes the first 3 years at Mansfield and the last 2 at the cooperating engineering school. At the end of 5 years and upon the successful completion of degree requirements for both schools the student receives two degrees — B.A. from Mansfield and B.S. from the cooperating school. Some of the fields available under this program are aerospace, geological, and petroleum engineering.

Within the 4 year B.A. program there can exist two areas of concentration 1) geology and 2) some aspect of space sciences such as astronomy. Both concentrations require a summer field experience. With proper advisement these two areas of concentration can be tailored toward career orientations in geophysics, geochemistry and astrophysics.

Recommended Lower Division Course Sequence: B.A. — Earth Space Sciences B.S.E. — Earth Space Sciences

First Semester*	S.H.	Second Semester	S.H.
Chem 111 Gen Chem I	4	Chem 112 Gen Chem II	4
Ma 140 Calculus I	3	Ma 141 Calculus II	3
Eng 112 Composition	3	Phys 188 Gen Phys I	4
Geol 121 Phys Geology	3	Spc 101 Oral Comm	3
Electives**	3	Elective**	3
HPE 101 PE	1		
	17		17
Third Semester		**Fourth Semester**	
Ma 240 Calculus I	3	Ma 241 Calculus IV	3
Phys 211 Gen Phys II	4	Phys 212 Gen Phys III	4
Astro 106 Universe	3	HPE 100 Health	2
HPE 101 PE	1	HPE 101 PE	1
Elective**	6	Major Elective	3
		Elective**	3
	17		16

* If required, Eng. 090, Ed. El. 090, and/or Math. 090 should be taken the first semester. Three, six, or nine semester hours of courses would be deferred to other semesters. The semester hours earned from these courses do not count towards the 128 semester hours needed for graduation.

**1. pre-engineers select general education requirements that simultaneously satisfy both MSC and the cooperating school
2. B.S.E. (Secondary School Teachers) participate in SEPEP program

Additional Major Requirements

1. B.A.-E.S.S. — Under close advisement the student selects 30 additional credits in all areas of natural sciences and math but particularly in geology and space sciences. Included in the 30 credits is a summer field experience usually taken between the junior and senior years.
2. B.A.-E.S.S./Pre-Engineering. Additional courses at MSC depend on which engineering program the student selects.
3. B.S.E.-E.S.S. — Under close advisement the student selects 27 additional credits in all areas of natural sciences and math but particularly in geology and space sciences. A total of 29 credits including student teaching is taken in the education area.

Department of Political Science

The Department of Political Science offers a general background in the field of American politics, comparative politics, international relations, public administration, and political theory, leading to the Bachelor of Arts degree. Courses in the department may be elected for general education credit. The Political Science majors offers a challenging course of study for students who will plan to play an active role in shaping public affairs. The program is designed to offer a combination of specialization in the major field with a broad general education. In combination with other fields of study, the program assists in the preparation of students who are interested in careers in law, public administration, local government, urban affairs, teaching, foreign service, public opinion research and journalism.

The department presently has two programs: one leading to the B.A. in Political Science and one B.S.E. Social Studies comprehensive-political science emphasis. Each of these programs has different requirements. The department has prepared an advisement manual which is available on request from the department chairperson.

The bachelor's degree is to be regarded as a stepping stone for careers and further education. In addition to the courses in the Political Science major, students should elect courses in the other social sciences and courses consistent with their career interests. A departmental advisor will assist students in planning a program to meet specific needs. Those students planning to attend graduate school should consult the requirements of the schools to which they plan to apply.

Department of Psychology

The Department of Psychology stresses the need for a broadly based background through the liberal arts disciplines. Majors are required to complete certain courses within the discipline, and the remaining hours in both the lower and upper divisions are viewed as free electives. The choice of all remaining courses should be based on the individual student's interests and motivation.

Students are encouraged to consult with their departmental advisors for help in selecting courses.

The Psychology B.A. with an emphasis in Academic Psychology, Human Relations or Personnel Administration is available.

In order to provide a sound background in behavioral science, the following core courses are required: Psy 101, 150, 200, and Ma 105.

B.A. in PSYCHOLOGY: Research emphasis provides preparation for master's or doctoral level study in Psychology. People who complete a doctoral program may ultimately be involved in activities that are primarily academic, research oriented, or professional.

In addition to the core courses, the following are required of the Psychology emphasis: Psy 250, 350, 351, 290, 291, 490, 495 or 496 or 497. Psychology majors are also required to select one of the following courses with laboratory: Psy 460, 461, or 462.

PSYCHOLOGY B.A., EMPHASIS IN HUMAN RELATIONS: Applied emphasis provides the student with an appreciation of the complexity of human behavior and specialized experiences preparatory to immediate employment in a variety of human-service settings including drug and alcohol abuse, treatment centers, diagnostic services, personnel offices, mental health and mental retardation facilities, and the justice system. Additionally, the option prepares students for acceptance into a wide range of related graduate programs such as community mental health, special education, counseling and guidance, vocational rehabilitation, and other human services.

In addition to the core of courses, the following are required of majors with an emphasis in Human Relations: Psy 201, 290, 291, 300, 301, and at least three of the following: Psy 210, 212, 310, 311, 312, 313, 320, 321, 322, 323, 330, 331, 332, 350, 351, 410, 430, 460, and 462.

PSYCHOLOGY B.A., EMPHASIS IN PERSONNEL ADMINISTRATION: Emphasis provides foundation skills necessary to fulfillment of newly emerging and traditional roles in personnel administration. Preparation includes a background in traditional personnel administration skills, such as interviewing and hiring, evaluation of progress and potential, increasing work efficiency, and arbitration of differences. Additional, less traditional preparation is directed toward fulfillment of demand from business and industry for personnel administrators who can perform advisory roles — i.e. recognition of emotional and/or social problems which impact upon productivity as well as appropriate preventive and remedial measures.

In addition to the core of courses, the following are required of majors with an emphasis in Personnel Administration: Psy 201, 311, 313, 332, 410, 462, 491, and 495; CIS 110; SOC 111, 203; BUS 130, 310; ECON 102; and PSCI 344.

Students have the option of doing Independent Study or, if qualified, of spending a full semester (or summer) in a field setting (Pre-Professional Experience, Psy 495) obtaining practical job experience and applied skills. Qualified majors in the Psychology, B.A., program have the option of doing a Research Apprenticeship (Psy 496) at a cooperating institution.

The Psychology Department also has established specialty tracks that serve the interests of its majors and those from other disciplines, e.g., human development (Psy 105, 290, 320, 321, 322, 323); social behavior (Psy 201, 210, 300, 301, 313, 332, 430, 462).

Recommended Semester Sequence: Psychology B.A.

First Semester*	S.H.	Second Semester	S.H.
Psy 101 Intro to Applications of Psychology	3	Psy 200 Survey and Data Analysis	3
Psy 150 Intro to Scientific Psychology	1	Ma 105 Intro to Statistics	3
Eng 112 Composition I	3	HPE 102 Physical Education	1
SPC 101 Oral Communication	3	Electives	9
HPE 100 Health	2		
HPE 101 Physical Education	1		
Elective	3		
	16		16
Third Semester		**Fourth Semester**	
Psy 250 Experimental Design I	4	Psy 291 Abnormal Psychology	3
Psy 290 Life-Span Development	3	Psy Elective	3
HPE 103 Physical Education	1	Electives	9
Electives	9		
	17		15
Fifth Semester		**Sixth Semester**	
Psy 350 Experimental I: Learning	3	Psy 351 Experimental II: Perception	3
Psy 350L Laboratory	1	Psy 351L Laboratory	1
Psy Elective	3	Psy Elective	3
Eng 313 Composition II	3	Electives	9
Electives	6		
	16		15
Seventh Semester		**Eighth Semester**	
Psy 460 Physiological Psych.	3	Psy 495 Pre-Professional Exp.	6-15
OR		OR	
Psy 461 Exp. Social Psychology	4	Psy 496 Research Apprenticeship	6-15
OR		OR	
Psy 462 Behavior Modification	3	Psy 497 Independent Study	3
Psy 460L or 462L	1	Electives to 15 SH	
Psy 490 Senior Seminar	3		
	16		15

* If required, Eng. 090, Math. 090, and/or Ed. El. 090 should be taken the first semester. Three, six, or nine semester hours of courses would be deferred to other semesters. The semester hours earned from these courses do not count towards the 128 semester hours needed for graduation.

Recommended Semester Sequence: Human Relations Option

First Semester*	S.H.	Second Semester	S.H.
Psy 101 Intro to Applications of Psychology	3	Psy Elective	3
Psy 150 Intro to Scientific Psychology	1	Ma 105 Intro to Statistics	3
Eng 112 Composition I	3	HPE 102 Physical Education	1
SPC 101 Oral Communication	3	Electives	9
HPE 100 Health	2		
HPE 101 Physical Education	1		
Elective	3		
	16		16

Third Semester	S.H.
Psy 200 Survey & Data Anal	3
Psy 290 Life-Span Development	3
HPE 102 Physical Education	1
Electives	9
	16

Fourth Semester	S.H.
Psy 201 Tests & Measurements	3
Psy 291 Abnormal Psychology	3
Psy Elective	3
Electives	6
	15

Fifth Semester	
Psy 300 Helping Skills I	3
Psy Elective	3
Eng 313 Composition II	3
Electives	9
	18

Sixth Semester	
Psy 301 Helping Skills II	3
Psy Elective	3
Electives	12
	18

Seventh Semester	
Psy 490 Senior Seminar	3
Electives	12
	15

Eighth Semester	
Psy 495 Pre-Professional Exp	6-15
OR	
Psy 497 Independent Study	3
Electives to 15 SH	
	15

* If required, Eng. 090, Math. 090, and/or Ed. El. 090 should be taken the first semester. Three, six, or nine semester hours of courses would be deferred to other semesters. The semester hours earned from these courses do not count towards the 128 semester hours needed for graduation.

Recommended Semester Sequence: Personnel Administration

First Semester*	S.H.
Psy 101 Intro to Applications of Psychology	3
Psy 150 Intro to Scientific Psychology	1
Eng 112 Comp I	3
Spc 101 Oral Communication	3
HPE 100 Health	2
HPE 101 Phys Ed	1
Elective	3
	16

Second Semester	S.H.
Psy 200, Survey & Data Analysis	3
Ma 105 Intro to Statistics	3
HPE 102 Phys Ed I	1
Bus 130 Intro to Business	3
Electives	6
	16

Third Semester	
Econ 102 American Economy	3
CIS 110 Intro to Accounting	3
Soc 111 Sociological Perspectives	3
HPE 103 Phys Ed	1
Electives	6
	16

Fourth Semester	
Psy 201 Tests & Measurements	3
Soc 203 Organizational Behavior	3
Psy 311 Intro to Small Group	3
Bus 310 Business & Society	3
Electives	3
	15

Fifth Semester	
Psy 313 Psychology of Interviewing	3
PSCI 344 Personnel Management	3
Electives	6
Eng 313 Composition II	3
	15

Sixth Semester	
Psy 332 Psychology of Stress Management	2
Psy 410 Industrial & Consumer Psychology	3
Electives	12
	17

Seventh Semester	S.H.	Eighth Semester	S.H.
Psy 462 Behavior Modification	3	Psy 495 Pre-Professional	
Psy 491 Senior Seminar in P.A.	3	Experience	6-15
Electives	9		
	15		6-15

* If required, Eng. 090, Math. 090, and/or Ed. El. 090 should be taken the first semester. Three, six, or nine semester hours of courses would be deferred to other semesters. The semester hours earned from these courses do not count towards the 128 semester hours needed for graduation.

School of Professional Studies

Mansfield State College has historically been known for the preparation of teachers. Today, the college has added many new dimensions as a multi-purpose institution. The School of Professional Studies includes the following departments:

Art
Business, Economics, and Computer Science
Criminal Justice Administration
Elementary Education
Geography and Regional Planning
Health and Physical Education
Home Economics
Music
Secondary Education
Sociology and Social Work
Special Education
Speech Communication and Theatre

A variety of programs are included at both undergraduate and graduate levels. The undergraduate programs include:

BA Art History
BA Studio Art
BSE Art Education
BA Sociology
BS Social Work
BS Business Administration
BA Speech Communications
(Speech, Broadcasting or Public Relations Emphasis)
BA Theatre
BA Criminal Justice
BSE Elementary Education
BA Geography
BA Geography
(Regional Planning Emphasis)
BA Liberal Arts
(Regional Planning Emphasis)
BSE Social Studies Comprehensive
(Geography Emphasis)
BS Home Economics
(Child and Family)
BS Home Economics
(Clothing and Textiles)
BS Home Economics Education
BS Home Economics
(Food Service)
BA Music
BA Music
(Jazz Emphasis)
BM Music
(Voice, Keyboard, Instrument or History — Literature and Theory Emphasis)
BMT Music Therapy
BSE Music Education
BS Music Merchandising

BSE Secondary Education:
- Speech/English
- French
- German
- Spanish
- Physics
- Mathematics
- Science
- Social Studies

BSE Special Education
BSE Public School Nursing

Department of Art

The Department of Art offers three degree programs for the student's specialized training in Art. The B.A. in Art History, the B.A. in Studio Art and the B.S.E. in Art Education are offered as four-year degree programs designed for the student's individual needs and interests. The Art Department offers varied experiences for the non-art major to explore and investigate visual imagery and communication and to develop skills in all studio courses on an individual basis. The Art History courses provide cultural and historical relevance for all college and special students.

THE BACHELOR OF ARTS DEGREE IN ART HISTORY offers students interested in the historical and cultural origins of the visual arts the opportunity of individually selecting 21 semester hours (S.H.) of electives in art history courses as well as gaining a solid foundation in studio art. A student selecting the Bachelor of Arts program in Art History will be prepared for graduate school and for jobs related to the program of study.

The Art History major has 31 S.H. of free electives which may be selected from any undergraduate course. Six S.H. of a language is required at the intermediate level for the Art History major to qualify for graduate programs, as most graduate schools offering a Master's Degree in Art History have a language requirement for admission to their programs of study.

THE BACHELOR OF ARTS DEGREE IN STUDIO ART provides interested students the opportunity to develop their studio skills to an advanced level of proficiency. The competencies and experiences, developed through training as a Studio Art major, will prepare the student as a professional artist and for graduate study. The Studio Art program offers the selection of two areas of concentration of 18 semester credit hours each. Students will major in one of the following concentrations: I.) Drawing, Painting and Printmaking or, II.) Ceramics, Jewelry, Sculpture, Fibers and Crafts.

Each Studio Art major will select 9 S.H. of studio course work which is not in his/her concentration area to help develop insights and skills in complementary areas of study. These may be taken any semester. The Studio Art major is required to elect 9 S.H. of art history courses of his/her choice during any semester to complete the program of study in the major of 51 S.H.

To complete the 128 S.H. for graduation the student has a choice of 21 S.H. of free electives to be selected from any undergraduate course.

THE ART EDUCATION CURRICULUM offers teaching certification through the School of Education. Upon satisfactory completion, the degree of Bachelor of Science in Art Education is awarded, qualifying the graduate to teach art in the elementary and secondary schools. The curriculum in Art Education is structured to guide prospective teachers in meeting the challenge of accomplishment in general education, to develop their abilities by providing studio experiences in the areas of drawing, painting, sculpture, graphic arts, ceramics and applied design, and to provide rich background in aesthetics, theory and criticism, as well as courses in psychology and the philosophy of

art education. Observation, participation and student teaching are the culminating experiences of the total Art Education Program.

The program contains the elements of a firm basis for the professional artist and, with additional training and experience, Art Education students may enter careers such as: Art Therapy, art for the mentally and physically handicapped, museum employment (curator or docent) and various commercial art opportunities.

All students must complete the core and group requirements of the General Education Program. All General Education requirements of 56 S.H. must be completed before graduation.

The transfer student is expected to meet all the requirements of the department. If the student's art experience is limited, the transfer student is expected to make up any required work. Such matters would be up to the judgment of the Chairman of the Art Department.

Candidates for admission to any one of the Art programs must meet the general requirements set by the Office of Admissions. Presentation of a portfolio during a personal interview with the art faculty is optional for all students.

It is suggested the portfolio contain some of the following:

1. Examples of two dimensional art such as drawing, painting, printmaking, collage, etc.
2. Examples of three dimensional art such as sculpture, jewelry, textiles, ceramics, crafts, etc. Slides or photos of the work are acceptable.
3. Examples in the field of design which will employ knowledge of design relationships, color and lettering.
4. Other examples of creative endeavor in the visual arts.

Two dimensional art should be presented in an attractive manner using clean-cut mats and proper backing support. Art that is copied from magazines and book reproductions of other artists will not be acceptable.

Recommended Semester Sequence: B.A. in Art History

First Semester*	**S.H.**	**Second Semester**	**S.H.**
ArtH 102 Survey of Art	3	ArtH 000 Art History Elective	3
Art 000 Studio Art Elective	3	Spc 101 Oral Communication	3
Eng 112 Composition I	3	HPE 100 Health	2
Select one Phys. Ed.	1	General Ed. Course	3
General Ed. Course	3	General Ed. Course	3
Free Elective	3	Free Elective	3
	16		17
Third Semester		**Fourth Semester**	
ArtH 000 Art History Elective	3	ArtH 000 Art History Elective	3
Select one Phys. Ed.	1	Art 000 Studio Art Elective	3
General Ed. Course	3	Select one Phys. Ed.	1
General Ed. Course	3	General Ed. Course	3
General Ed. Course	3	General Ed. Course	3
Free Elective	3	Free Elective	3
	16		16
Fifth Semester		**Sixth Semester**	
ArtH 000 Art History Elective	3	ArtH 000 Art History Elective	3
Art 300 Visual Studies	3	ArtH 000 Art History Elective	3
Art 000 Studio Elective	3	General Ed. Course	3
Eng 313 Composition II	3	General Ed. Course	3
General Ed. Course	3	Free Elective	3
	15		15

Seventh Semester	S.H.
ArH 000 Art History Elective	3
Art 404 Special Prob. in Art	3
General Ed. Course	3
General Ed. Cousre	3
Free Elective	3
Free Elective	3
	18

Eighth Semester	S.H.
General Ed. Course	3
Free Elective	3
Free Elective	3
Free Elective	3
Free Elective	3
	15

* If required, Eng. 090, Math. 090, and/or Ed. El. 090 should be taken the first semester. Three, six, or nine semester hours of courses would be deferred to other semesters. The semester hours earned from these courses do not count towards the 128 semester hours needed for graduation.

Recommended Semester Sequence: B.A. in Studio Art

First Semester*	S.H.
Art 210 Drawing I	3
Art 241 Color & Design	3
ArtH 102 Survey of Art	3
Eng 112 Composition I	3
Select one Phys. Ed.	1
General Ed. Course	3
	16

Second Semester	S.H.
Art 295 Crafts	3
Art 000 Select from Studio Concentration	3
Spc 101 Oral Communication	3
HPE 100 Health	2
General Ed. Course	3
General Ed. Course	3
	17

Third Semester	
Art 000 Select from Concentration	3
Art 000 Select from Concentration	3
ArtH 000 Art History Elective	3
General Ed. Course	3
General Ed. Course	3
	15

Fourth Semester	
Art 000 Select from Concentration	3
Art 000 Studio Art Elective	3
ArtH 000 Art History Elective	3
General Ed. Course	3
General Ed. Course	3
	15

Fifth Semester	
Art 000 Select from Concentration	3
Art 000 Studio Art Elective	3
Art 300 Visual Studies	3
Eng 313 Composition II	3
General Ed. Course	3
Select one Phys. Ed.	1
	16

Sixth Semester	
Art 000 Select from Concentration	3
ArtH 000 Art History Elective	3
General Ed. Course	3
General Ed. Course	3
General Ed. Course	3
Free Elective	3
	18

Seventh Semester	
Art 000 Studio Art Elective	3
Select one Phys. Ed.	1
General Ed. Course	3
Free Elective (Art 403 Seminar Recommended)	1
Free Elective	2
Free Elective	3
Free Elective	3
	16

Eighth Semester	
General Ed. Course	3
General Ed. Course	3
Free Elective	3
Free Elective	3
Free Elective	3
	15

* If required, Eng. 090, Math. 090, and/or Ed. El. 090 should be taken the first semester. Three, six, or nine semester hours of courses would be deferred to other semesters. The semester hours earned from these courses do not count towards the 128 semester hours needed for graduation.

Recommended Semester Sequence: B.S.E. in Art Education

First Semester*	S.H.
Art 210 Drawing I	3
Art 241 Color & Design	3
ArtH 102 Survey of Art	3
Eng 112 Composition I	3
Select one Phys Ed	1
General Ed. Course	3
	16

Second Semester	S.H.
ArtE 288 Hist. & Phil. of Ed.	3
Art 295 Crafts	3
Art 000 Beginning Studio	3
Spc 101 Oral Communication	3
HPE 100 Health	2
General Ed. Course	3
	17

Third Semester	
ArtE 290 Art in Elementary Tchg.	3
Art 000 Beginning Studio	3
Select on Phys Ed	1
General Ed. Course	3
General Ed. Course	3
General Ed. Course	3
	16

Fourth Semester	
ArtE 292 Art in the Secondary	3
Art 000 Beginning Studio	3
General Ed. Course	3
General Ed. Course	3
General Ed. Course	3
Free Elective	3
	18

Fifth Semester	
ArtE 294 Curriculum Development	2
Art 000 Beginning Studio	3
ArtH 225 History of Modern Art	3
Psy 230 Ed. Psych.	3
Eng 313 Composition II	3
General Ed. Course	3
	17

Sixth Semester	
Art 000 Beginning Studio	3
Art 000 Advanced Studio	3
Ed. 302 Audio Vis. Communication	2
Select one Phys. Ed.	1
General Ed. Course	3
General Ed. Course	3
	15

Seventh Semester	
Art 000 Beginning Studio	3
Art 000 Advanced Studio	3
Art 300 Visual Studies	3
General Ed. Course	3
General Ed. Course	3
Free Elective	2
	17

Eighth Semester	
Ed. 400 Student Teaching	12

* If required, Eng. 090, Math. 090, and/or Ed. El. 090 should be taken the first semester. Three, six, or nine semester hours of courses would be deferred to other semesters. The semester hours earned from these courses do not count towards the 128 semester hours needed for graduation.

The Department of Business, Economics, and Computer Science

The Department of Business, Economics, and Computer Science offers programs leading to a Bachelor of Science Degree in Business Administration and a Bachelor of Science Degree in Computer and Information Science. The Computer and Information Science Program has two emphases available, one in Information Science and the other in Computer Science. A formal major in Economics is not offered by the department at the present time, but substantial course work can be obtained in the department.

Business Administration Degree

The real world of business, industry, and government requires an understanding of complex relationships as well as certain concepts, skills, and techniques. The Bachelor of Science degree program in Business Administration is intended to provide a broad general education in business and management emphasizing common underlying concepts, and without undue specialization in any one field. In addition, the program

prepares students who are so inclined for graduate study in business, quantitative methods, and law.

All majors must satisfactorily complete a core of fifteen (15) courses totaling forty-five (45) semester hours, and four (4) additional courses totaling twelve (12) semester hours elected from cognate areas. Those core courses required of all majors are BUS 130, 330, 340, 345, 350, 410, 490; ACC 110, 111, 215; CIS 105, 480; ECON 101, 102; SOC 203. The opportunity exists for qualified students to spend a semester as an intern working in a business or industry, thus acquiring practical knowledge and experience while earning up to 15 college credits.

Beyond these requirements there is sufficient flexibility in the program to allow those students who desire to tailor, by judicious selection of electives in this and other departments, a concentration in an area of their choice. Examples of such areas are accounting, advertising, economics, information processing, information systems management, marketing, and quantitative methods. Additional courses are planned which are expected to make other concentrations available.

By election of appropriate accounting courses, successful students will be qualified to sit in their senior year for the examination for the Certificate in Management Accounting, administered by the Institute of Management Accounting; and/or for the examination for Certified Public Accountant, administered by the Pennsylvania Board of Examiners. Interested students should consult with the Department Chairperson for further information.

Another available opportunity for the student depends on the fact that business, industry and government are coming to increasingly rely on computerized information processing. A joint major in Business and Information Processing will provide the student with background to take advantage of this trend. A dual major must complete all requirements in both majors. These include the business core: CIS 104, CIS 205, CIS 225, CIS 230, CIS 301, CIS 310, CIS 325, CIS 401, PHIL 230 and 4 major electives. Interested students should contact the department chairperson.

The Bachelor of Science program in Business Administration is housed in the Department of Business, Economics, and Computer Science. The department also offers the Bachelor of Science degree in Computer and Information Science, and it is possible for the superior student to achieve a double major in four years.

Recommended Semester Sequence: Business Administration Degree

First Semester*	**S.H.**	**Second Semester**	**S.H.**
Eng 112 Composition I	3	HPE 100 Health	2
SPC 101 Oral Communication	3	HPE 101 Physical Education I	1
ACC 110 Principles of Accounting I	3	ACC 111 Principles of Accounting II	3
BUS 130 Introduction to Business & Management	3	MA 109 Finite Mathematics	3
MA 105 Introductory Statistics	3	SOC 111 Sociological Perspectives	3
Elective	3	Elective	3
	18		15
Third Semester		**Fourth Semester**	
ACC 215 Managerial Accounting	3	BUS 330 Marketing	3
Econ 101 American Economy: Macro or 102 American Economy: Micro	3	Econ 101 American Economy: Macro or 102 American Economy: Micro	3
MA 111 Fundamental Concepts of Calculus	3	CIS 105 Business Prog. & Infor. Processing	3
SOC 203 Organizational Behavior	3	HPE 201 Physical Education III	1
HPE 102 Physical Education II	1	Electives	6
Elective	3		
	16		16

Fifth Semester		Sixth Semester	
BUS 340 Finance	3	BUS 410 Business Law and Ethics	3
BUS 345 Government and Business in Society	3	CIS 480 Operations Research	3
Eng 313 Composition II	3	Electives	9
Electives	9		
	18		15
Seventh Semester		**Eighth Semester**	
BUS 350 Production Management	3	BUS 490 Business Policy	3
Electives	12	Electives	12
	15		15

* If required, Eng. 090, Math. 090, and/or Ed. El. 090 should be taken the first semester. Three, six, or nine semester hours of courses would be deferred to other semesters. The semester hours earned from these courses do not count towards the 128 semester hours needed for graduation.

Computer and Information Sciences

Emergence of computers as major devices in the handling of great amounts of information is a very recent development. The two program options described below are designed to allow a student to enter either Computer Science or Information Science. The Information Science option is designed to teach recognition of and procedures for meeting information systems for managerial needs in business organizations, but those of governmental agencies, health services, social welfare organizations and others are treated. Further, the courses provide for mastering computer technology, application and theory well beyond computer programming level.

The Bachelor of Science degree in Computer and Information Science with an emphasis in Information Science requires satisfactory completion of fifteen (15) courses totaling forty-five (45) semester hours; and seven (7) particular courses in other areas. Those courses required of all majors are: CIS 104, 105, 205, 225, 230, 301, 310, 325, 401, 480; ACC 110, 111, 215; BUS 130; and SOC 203. The opportunity exists for qualified students to spend a semester as interns working in an industrial or governmental office, thus acquiring practical knowledge and experience while earning up to 15 college credits.

The second emphasis is in Computer Science and requires satisfactory completion of fifteen (15) courses totaling forty-five (45) semester hours; and six (6) particular courses in other areas. Those courses required of all majors are: CIS 104, 105, 205, 230, 301, 325, 335, 430, 480; MA 240, 241, 260, 280, 310, 313. The intent of the Computer Science emphasis is to develop an understanding of the nature of computers and the ways in which they are used. This emphasis is given in cooperation with the Department of Mathematics.

The program is flexible allowing students to place their emphases also in computer applications or on organizational systems. Successful students will, in their senior year, be qualified to sit for the Certification in Data Processing (CDP) examination administered by the Institute for Certification of Computer Professionals.

By election of appropriate accounting courses successful students will also be qualified to sit for the examination for the certificate in Management Accounting, administered by the Institute of Management Accounting, and/or for the examination for Certified Public Accountant, administered by the Pennsylvania State Board of Examiners. Interested students should consult with the Department Chairperson for further information.

The Bachelor of Science program in Computer and Information Sciences is housed in the Department of Business, Economics, and computer Science.

The Department also offers the Bachelor of Science degree in Business Administration (see Business Administration), and it is possible for the superior student to achieve a double major in four years.

Students interested in gaining a general appreciation of the significance and potential consequences of the use of computers in modern society are encouraged to elect the Computers in Society course. Several courses when combined will provide non-majors with a foundation in modern accounting practice.

Recommended Semester Sequence: Information Science Emphasis

First Semester*	S.H.	Second Semester	S.H.
Eng 112 Composition I	3	SPC 101 Oral Communication	3
ACC 110 Principles of Accounting I	3	ACC 111 Principles of Accounting II	3
BUS 130 Intro to Bus & Mgmt.	3	CIS 105** Bus Prog. & Info Processing	2
CIS 104** Intro to Computer Sci	3	MA 105 Intro Statistics	3
SOC 111 Sociol Persp	3	SOC 203 Organizational Behav	3
Elective	3	Elective	3
	18		18
Third Semester		**Fourth Semester**	
ACC 125 Managerial Accounting	3	CIS 225 Automated Acc Systems	3
CIS 205** Intro to File Processing	3	CIS 230** Lang and Struc of Computers	3
MA 109 Finite Mathematics	3	MA 111 Fund Concepts of Calc	3
HPE 100 Health	2	Phil 230 Introduction to Logic	3
HPE 101 Physical Education I	1	HPE 102 Physical Education II	1
Elective	3	Elective	3
	15		16
Fifth Semester		**Sixth Semester**	
CIS 301** Data Structure	3	CIS 310 Intro to Systems Analysis	3
Econ 101 American Econ: Macro or 102 American Econ: Micro	3	CIS 325** Oper & Program Syst	3
Eng 313 Composition II	3	Econ 101 American Econ: Macro or 102 American Econ: Micro	3
HPE 201 Physical Education III	1	Electives	6
Electives	6		
	6		
Seventh Semester		**Eighth Semester**	
CIS 401 Mgmt Info Systems	3	CIS 480** Operations Research	3
Electives	12	Electives	12
	15		15

* If required, Eng. 090, Math. 090, and/or Ed. El. 090 should be taken the first semester. Three, six, or nine semester hours of courses would be deferred to other semesters. The semester hours earned from these courses do not count towards the 128 semester hours needed for graduation.

** Common to both emphases

Recommended Semester Sequence: Computer Science Emphasis

First Semester*	S.H.	Second Semester	S.H.
Eng 112 Composition I	3	HPE Physical Education	1
SPC 101 Oral Communication	3	CIS 105** Prog. and Info Processing	3
HPE 100 Health	2	MA 141 Analytical Geom & Calc II	3
HPE 101 Physical Education I	1	MA 160 Intro to Applied Math	3
CIS 104** Intro to Computer Sci	3	Phy 188 General Physics I	4
MA 140 Analytical Geom and Calc I	3	Elective	3
Elective	3		
	18		17

Third Semester	S.H.
CIS 205** Intro to File Process	3
MA 240 Analytical Geom and Calc III	3
MA 260 Discrete Structures	3
Phys 211 General Physics II	4
HPE 201 Physical Education III	1
Electives	3
	17

Fourth Semester	S.H.
CIS 230** Lang and Struc of Computers	3
MA 241 Analytical Geom and Calc IV	3
MA 280 Linear Algebra & Matrix Theory	3
Electives	7
	16

Fifth Semester	
CIS 301** Data Structures	3
MA 310 Numerical Analysis	3
Econ 101 American Econ: Macro or 102 American Econ: Macro	3
Eng 313 Composition II	3
Elective	3
	15

Sixth Semester	
CIS 325** Oper & Program Syst	3
CIS 335 Assembly Lang Program	3
Econ 101 American Econ: Macro or 102 American Econ: Macro	3
Electives	7
	15

Seventh Semester	
CIS 430 Organiza of Prog. Lang	3
MA 313 Applied Probability Stat	3
Electives	9
	15

Eighth Semester	
CIS 480** Operations Research	3
Electives	12
	15

* If required, Eng. 090, Math. 090, and/or Ed. El. 090 should be taken the first semester. Three, six, or nine semester hours of courses would be deferred to other semesters. The semester hours earned from these courses do not count towards the 128 semester hours needed for graduation.

** Common to both emphases.

Economics

Providing knowledge of the ways money, people and products are interrelated, especially in American society, is the principal emphasis of the offerings of economics. Students interested in careers in business, governmental service or law should consider taking work in this area. A sound foundation in economics is desirable for most graduate programs in business administration or public administration.

Although a formal major in economics is not offered at the present time, students majoring in Business Administration may achieve an emphais in economics by tailoring their electives to include additional economics courses. Those students desiring to do graduate study in economics should consult with the faculty.

The economics faculty is part of the Department of Business, Economics, and Computer Science.

Department of Criminal Justice Administration

The Department of Criminal Justice Administration offers a wide, systems based background in Law Enforcement, Corrections, and Judicial Administration leading to a Bachelor of Arts degree. Students in Criminal Justice Administration are prepared for entry in law enforcement agencies, institutional or community-based corrections, or other positions in Criminal Justice Administration. (Those entering municipal and State Police Departments are, in addition, required by statute to undertake training at Police Academies.) In combination with other fields of study the program in Criminal Justice Administration assists in the preparation of students who are interested in careers in law, public administration, planning, court services, criminology, juvenile delinquency control, crime prevention, and urban problems. The department also prepares students who

wish to pursue graduate study in general and specialized areas of Criminal Justice Administration.

A prudent selection of courses is most desirable in preparing for immediate employment or post-graduate education. Therefore, great emphasis is placed on student-advisor relationships. Opportunity is provided for field experience in a public Criminal Justice agency and other agency positions in the private sector through directed internships.

All students must fulfill the General Education requirements of the College.

First Semester*	**S.H.**
CJA 100 Intro to CJA	3
HPE 100 Health	2
ENG 112 Composition I	3
PSYCH or SOC Gen Ed.	3
PSCI 101 or 202	3
SCI, MATH or LANG Gen Ed.	3-4
	17-18

Second Semester	**S.H.**
CJA 101 Intro to Corr	3
PHYS ED I	1
SPC 101 Oral Communication	3
PSYCH or SOC Gen Ed.	3
CJA Elective	3
SCI, MATH or LANG Gen Ed.	3-4
	16-17

Third Semester	
CJA 102 Intro to LENF	3
PSCI 240 Public Admin.	3
PHYS ED II	1
PHIL 201 or ENG 213	3
Humanities Gen Ed.	3
SCI, MATH, or LANG Gen Ed.	3
	16-17

Fourth Semester	
CJA 295 or 359	3
CJA Elective	3
Humanities Gen Ed.	3
PSYCH or SOC Elective	3
Free Elective	3
SCI, MATH, or LANG Gen Ed.	3
	18-19

Fifth Semester	
CJA 324 or 326	3
CJA Elective	3
Humanities Gen Ed.	3
PSYCH or SOC Elective	3
ENG 313 Composition II	3
SCI, MATH, or LANG Gen Ed.	3-4
	18-19

Sixth Semester	
CJA 354 or 355	3
CJA Elective	3
PSCI 305 or 323	3
Free Elective	3
SCI, MATH, or LANG Gen Ed.	3-4
	15-16

Semester (Model I)	
PSCI 342, 344, or 347	3
CJA Electives (2)	6
Free Electives (2)	6
PHYS ED III	1
	16

Semester (Model I)	
Internship**	12
	12

Model II	
Internship	12
	12

Model II	
PSCI 342, 344, or 347	3
CJA Electives (2)	6
Free Electives (2)	6
PHYS ED III	1
	16

* If required, Eng. 090, Math. 090, and/or Ed. El. 090 should be taken the first semester. Three, six, or nine semester hours of courses would be deferred to other semesters. The semester hours earned from these courses do not count towards the 128 semester hours needed for graduation.

** Internships are elective and are not mandatory.

Department of Elementary Education

Elementary Education at Mansfield State College has as its purpose the preparation of men and women for teaching in the elementary school. It is a four-year program leading to the degree of Bachelor of Science in Education. Included is a sequence of field experiences at the sophomore, junior and senior years. Offerings in the Department of Elementary Education and in related professional education departments should be scheduled during the junior and senior years.

The Department of Elementary Education recommends that students planning to major in Elementary Education make a strong effort to build a background of experience with young children. A student may choose to work in summer camps or playgrounds, in summer school programs as teacher aides or in similar activities. In some cases students find it advantageous to serve in a para-professional role with children prior to initiating formal academic work.

Students tentatively in the field of elementary education should include Psy 101 and 230 in their first two years. Students are expected to complete both courses prior to enrolling in elementary education courses at the junior level.

EdE1 201 is to be scheduled during the first semester of the freshman year; EdE1 202 is to be scheduled during the sophomore year. These courses are required for acceptance as an upper division student with a major in elementary education. Students planning to transfer to Mansfield State College at the junior year should contact the department chairperson regarding the EdE1 201-202 requirements.

During the last semester as a sophomore, a student will apply to the Department of Elementary Education for acceptance as an upper division student with a major in Elementary Education. Requirements for upper division acceptance include: near completion of the General Education requirements, an overall 2.0 quality point average, grades of "C" or better in freshman English, and recommendation by the student's advisor.

During the junior year a student will be scheduled for a Professional Semester. The Professional Semester includes six courses in the major area of specialization, and an observation/participation experience in the local elementary school. This integrated experience serves as an opportunity for students to work with boys and girls in a classroom setting and to participate in a variety of experiences related to the methods courses offered by the department.

In the major area of specialization, the following courses are also required: EdE1 350, 380, 392, 403, and HPE 350.

As part of the major area of specialization, students must complete at least 15 semester hours in one of the following areas: Art, Early Childhood Education, English, Foreign Languages, Mathematics, Music, Sciences, Social Sciences, Speech and Theatre, Communication Skills, Environmental Education, Education of Exceptional Children, and Gifted.

In order to meet minimum requirements for student teaching, students must maintain at least an overall 2.0 quality point average and a 2.0 average for their major area of specialization as indicated above.

Students who major in Elementary Education are required to complete an additional 21 semester hours in professional education, including Ed 301, 302, 401, EdE1 401, and 400.

Suggested Semester Schedule: Elementary Education Major Approved Program

First Semester**	**S.H.**
Eng 112 Composition I	3
HPE 101 Physical Education I	1
MA 101 Fund Conc Math*	3
Bio 101 Man and Bio World*	4
HPE 100 Health	2
Psy 101 Intro to App of Psy	3
EdE1 201 Pre-Prof Experience	1
	17

Second Semester	**S.H.**
SPS 101 Oral Communication	3
HPE 101 Physical Education II	1
Geo 102 Human Geography*	3
MA 201*	3
Phil 201 Intro to Philosophy*	3
General Education Electives	3
	16

Third Semester	
EdE1 202 Pre-Prof Experience	2
Psy 230 Ed Psych	3
Hist 201 Hist thru Civil War	3
Physics 151*	4
Eng 201, 202, 210, 225*	3
General Ed Elective	3
	18

Fourth Semester	
HPE 203 Physical Education III	1
Physics 152*	4
Electives (Group requirements and Area of Concentration)	12
	17

Fifth or Sixth Semester	
EdE1 350 Child Development	3
EdE1 380 Teaching Music	3
OR	
EdE1 392 Teaching Art	3
Ed 302 Audio Visual Communications	2
HPE 350 Teaching HPE	2
Eng 313 Composition II	3
Elective	3
	16

Professional Semester	
EdE1 301 Observation & Participation	2
EdE1 360 Chidren's Literature	3
EdE1 383 Teaching of Reading	3
EdE1 384 Teaching Mathematics	3
EdE1 386 Teaching of Social Studies	3
EdE1 387 Teaching of Science	3
	17

Seventh Semester	
EdE1 401 Sem in Elem Ed (See Note)	2
Ed 301 Evaluative Techniques	2
Ed 401 Hist and Phil of Ed	3
EdE1 380 Teaching Music	
OR	
EdE1 392 Teaching Art	3
EdE1 403 Communication Skills	3
Elective	3
	16

Eighth Semester	
Ed 400 Student Teaching	12
PLEASE NOTE: The department recommends that students schedule EdE1 401 Seminar in Elementary Education *for the semester prior to* student teaching.	

* Recommended Courses

** If required, Eng. 090, Math. 090, and/or Ed. El. 090 should be taken the first semester. Three, six, or nine semester hours of courses would be deferred to other semesters. The semester hours earned from these courses do not count towards the 128 semester hours needed for graduation.

Department of Geography and Regional Planning

The Department of Geography and Regional Planning offers programs well suited and carefully designed for our contemporary society. Students may elect, for instance, either the liberal arts, B.A. degree program with its several options, or the social studies comprehensive-geography emphasis, B.S. degree program. The options available to students in the liberal arts program are (1) a major in geography with ample opportunity for a concentration in one of several applied areas of geography which provide career

opportunities, (2) a major in geography with an emphasis in regional planning, and (3) a major in any liberal arts field with the regional planning emphasis.

The B.A. degree program in geography is intended to prepare geography majors for graduate study or entrance into the many and varied fields of employment in government and business open to geographers. A judicious selection of courses is most important in preparing for future employment. Thus, the Department places strong emphasis on the student-advisor relationship. An individually tailored program permits sufficient flexibility for the student who knows his/her area of specialized interest, while at the same time a generally broad geographic perspective assures that the objectives of the Department are met. Students are strongly advised to seek out their assigned or selected advisor early in their college program.

All Mansfield students must satisfy the General Education requirements of the College before being admitted to upper-divisional study in their major field. In fulfilling these General Education requirements, geography majors should give their most serious consideration to improving or obtaining those basic skills which will enhance their degree. These skills include clear writing, effective speaking, a foreign language, and the use of statistics and the computer.

Geograhy 102 (Human Geography) and Geography 111 (Physical Geography) are required courses in the General Education program for geography majors. Beyond this requirement, students must complete thirty-six hours of geography or approved cognate courses. Of the thirty-six hours, thirteen hours must include Geog. 230 (Cartography), Geog. 360 (Economic Geography), Geog. 380 (Geography of U.S. and Canada), and Geog. 498 (Senior Seminar). The remaining twenty-three hours will be arranged with the student's advisor to meet the individual's special interest. This leaves, on the average, thirty-six semester hours of general electives and ample opportunity for the B.A. student to develop a concentration in one of the applied areas of geography which provide career opportunities, for example, with retailers, manufacturers, travel agencies, economic consultant firms, and mapping agencies.

Recommended Semester Sequence: B.A. in Geography

First Semester*	**S.H.**	**Second Semester**	**S.H.**
HPE 100 Health	2	Eng 112 Composition I	3
HPE 101 Physical Education	1	HPE 102 Physical Education	1
Spc 101 Oral Communication	3	Geog 111 Physical Geography	3
Geog 102 Human Geography	3	General Education Requirements	9
General Education Requirements	6		
	15		16
Third Semester		**Fourth Semester**	
HPE 203 Physical Education	1	Geog 380 Geography U.S. & Canada	3
Geog 230 Cartography	4	Geography Electives	6
Geog 360 Economic Geography	3	General Education Requirements	9
General Education Requirements	9		
	17		18
Fifth Semester		**Sixth Semester**	
Eng 313 Composition II	3	Geography Electives	9
Geography Electives	6	General Electives	9
General Education Requirement	3		
General Elective	3		
	15		18

Seventh Semester	S.H.	Eighth Semester	S.H.
Geography Electives	3	Geog 498 Senior Seminar	3
General Electives	12	General Electives	12
	15		15

* If required, Eng. 090, Math. 090, and/or Ed. El. 090 should be taken the first semester. Three, six, or nine semester hours of courses would be deferred to other semesters. The semester hours earned from these courses do not count towards the 128 semester hours needed for graduation.

The B.A. degree program in geography with a regional planning emphasis is intended to prepare students for a career in planning. This program differs from the straight geography major, B.A. program, in the following ways: by (1) a reduction in the number of hours required for the major — from thirty-six to thirty-one semester hours — although the required courses for the major remain the same and by (2) a "Professional Sequence" of thirty-six semester hours. The General Education requirements remain basically the same, although the Department strongly recommends that students take statistics (Ma. 105) and computer programming (Ma. 107) as part of their General Education program.

Recommended Semester Sequence: B.A. in Geography, Regional Planning Emphasis

First Semester*	S.H.	Second Semester	S.H.
HPE 100 Health	2	Eng 112 Composition I	3
HPE 101 Physical Education	1	HPE 102 Physical Education	1
Spc 101 Oral Communication	3	Reg Pl 102 Intro to Reg. Planning	3
Geog 102 Human Geography	3	General Education Requirements	9
General Education Requirements	6		
	15		16
Third Semester		**Fourth Semester**	
HPE 203 Physical Education	1	Geog 360 Economic Geography	3
Geog 111 Physical Geography	3	Geog 380 Geography U.S. & Canada	3
Geog 230 Cartography	4	Reg Pl 342 Land Use Policy	3
General Education Requirements	9	General Education Requirements	9
	17		18
First Semester		**Second Semester**	
Eng 313 Composition II	3	Geog 498 Senior Seminar	3
Reg Pl 362 Tech of Geog Measure	3	Geography Electives	6
Geography Electives	3	Reg Pl 430 Modern Cartography	3
General Education Requirements	9	Regional Planning Electives	6
	18		18
First Semester		**Second Semester**	
Reg Pl 496 Planning Seminar	3	Reg Pl 494 Planning Internship	12
Regional Planning Electives	3		
Geography Elective	3		
General Electives	6		
	15		

* If required, Eng. 090, Math. 090, and/or Ed. El. 090 should be taken the first semester. Three, six, or nine semester hours of courses would be deferred to other semesters. The semester hours earned from these courses do not count towards the 128 semester hours needed for graduation.

The B.A. degree program in liberal arts with a regional planning emphasis takes into account the multi-disciplinary nature of the planning profession. Thus, any student in liberal arts and sciences, regardless of major, can enroll, if he or she wishes, in this

program. However, in addition to the professional sequence of thirty-six required hours, the student must fulfill a required core program of three geography courses: Geog. 102 (Human Geography), Geog. 111 (Physical Geography), and Geog. 230 (Cartography).

The B.S. social studies comprehensive-geography emphasis program is designed to meet the general standards pertaining to college programs for the preparation of social studies teachers. The Department stresses the interdisciplinary approach to solving social-environmental programs and the cultural-historical approach to area (i.e., world cultures) studies. In combination with other programs, the Department also contributes to the preparation of teachers for earth-general science.

General Education requirements are similar to those noted in the previous programs. The exception is found in the Group V — Social Science requirement (note evaluation record). The fifteen semester hour "emphasis" in geography should be principally, although not exclusively, selected from a "Department list of courses," many of which have been specifically developed and designed to meet the needs of the future social studies-geography secondary school teacher. The first course taken, however, should be Geog. 102 (Human Geography). As an approved General Education course, it is strongly suggested that it be the geography course taken within Group V of General Education.

Department of Home Economics

The Home Economics curriculum emphasizes both the theoretical and practical bases which contribute to preparing home economists who will work professionally or as volunteers to improve the quality of life for individuals and families. Four major home economics programs are offered and from these the students may choose one of five options: Child and Family Services, Consumer Service or Dietetics, and Home Economics Education. Common to all four of the home economics programs is a core of introductory home economics courses which provides the opportunity to survey the many and varied careers in home economics.

Studies in general education help the student to broaden his or her academic background and to provide some depth study in the root disciplines upon which home economics is based, including humanities, natural sciences, social sciences, mathematics, and languages. Courses in the professional area provide the practical and theoretical background which help one to achieve competencies necessary for becoming a professional home economist. Home economics courses provide some expertise in at least one of the five areas of home economics and an acquaintance with the other areas of home economics. Graduates of all programs receive a Bachelor of Science degree.

Child and Family Services

The Child and Family Services Program offers the student an overview of the total human life span from conception through old age. Each student may select an emphasis for in-depth study in early childhood education and child development, family relations and counseling, or child and family agencies.

The student in this program will have varied opportunities for observation and participation in field experiences with individuals and families. During the senior year the student will devote one semester to participation in a social agency to obtain professional experience in the field

Opportunities for employment range from day care and early childhood education to services for the elderly, with other in family counseling and child and family agencies. The student is encouraged to carefully plan with an advisor the selection of courses of general education and electives to complement the student's interests and employment goals.

Home Economics students, having achieved a B average, may elect to spend one

semester or a summer during the junior or senior years at the Merrill-Palmer Institute of Human Development and Family Life in Detroit, Michigan

Semester Sequence: Child and Family Services

First Semester*	S.H.	Second Semester	S.H.
HEc 101 Home Economics Orient.	1	HEc 101 Clothing and Man	3
HEc 131 Intro to Child & Fam.	2	HEc 111 Nutri. Ecol. of Man	3
HPE 100 Health	2	Eng 112 Composition I	3
HPE 101 Physical Education	1	HPE 102 Physical Education	1
Bio 101 Man & Bio World	4	SpEd 101 Intro to Ex. Child	3
Spc 101 Oral Communication	3	Soc 111 Social Perspectives	
Psy 101 Intro to App. Psych.	3	OR	
		Soc 121 Contemp. Soc. Prob.	3
	16		16
Third Semester		**Fourth Semester**	
HEc 121 Personal & Fam. Mgm't.	2	HEc 216 Food for the Family	3
HEc 231 First Years of Child	3	General Education	15
HEc 232 The American Family	3		
HPE 203 Physical Education	1		
General Education	9		
	18		18
Fifth Semester		**Sixth Semester**	
HEc 321 Consumer Economics	3	HEc 323 Interior Environment	3
HEc 332 The Adolescent	3	HEc 330 Child and Fam. Agencies	3
HEc 334 Issues in Cont. Fam. Lif.	3	HEc 333 Parent-Child Study	3
Eng 313 Composition II	3	HEc 336 Adulthood & Aging	3
General Education	6	Elective	3
	18		15
Seventh Semester		**Eighth Semester**	
HEc 436 Pre-professional Sem.	2	HEc 439 Professional Semester	
ID 499 Seminar in Ear. Ch. Ed.	2	in Child & Family	
General Education	2-4		
Electives	7-9		
	15		12

* If required, Eng. 090, Math. 090, and/or Ed. El. 090 should be taken the first semester. Three, six, or nine semester hours of courses would be deferred to other semesters. The semester hours earned from these courses do not count towards the 128 semester hours needed for graduation.

Consumer Services — Clothing and Textiles Option

The Consumer Services Program, with its two options, is selected by home economics students who plan to become home economists in business. Students selecting the Consumer Service — Clothing and Textiles option are prepared for entry-level positions in merchandising and with clothing manufacturers, pattern companies and other companies producing items used in clothing construction. The student has the opportunity to specialize in clothing and textiles with supporting courses in art, communications and business. The student has a supervised work experience in the clothing and textile field which includes a fashion tour to New York City.

Semester Sequence: Consumer Services Clothing and Textiles Option

First*	**S.H.**
HEc 100 Home Economics Orient.	1
HEc 101 Clothing and Man	3
HPE 101 Physical Education	1
HPE 100 Health	2
Psy 101 Intro to App. Psy.	3
Spc 101 Oral Communication	3
Bio 101 Man & Bio World	4
	17

Second Semester	**S.H.**
HEc 111 Nutri. Ecol. of Man	3
HEc 121 Personal & Fam. Mgm't.	2
HEc 131 Intro to Ch. & Fam.	2
Eng 112 Comp. I	3
HPE 102 Physical Education	1
Bus 130 Intro to Business	3
Ma 107 Intor to Comp. Prog. OR Ma 105 Intro to Statistics OR CIS 110 Intro to Accounting	3
	17

Third Semester	
HEc 201 Fund. of Clothing	3
HPE 203 Physical Education	1
Art 241 Color and Design	3
Chem 101 Intro to Chemistry	4
Soc 111 Socio. Perspect.	3
General Education	3
	17

Fourth Semester	
HEc 102 Fund. of Fashion	2
Chem 102 Organic & Biochem.	4
Econ 101 Macro Economics	3
General Education	9
	18

Fifth Semester	
HEc 302 Apparel Des. Anal.	3
HEc 303 Tailoring	3
Ed 302 A-V Communications	2
Eng 313 Comp. II	3
General Education	3
Elective	3
	17

Sixth Semester	
HEc 321 Consumer Economics	3
HEc 323 Interior Environment	3
HEc 403 Flat Pattern Design	3
Electives	6
	15

Seventh Semester	
Professional Semester — This semester cannot be changed. Fall Sem. Only	
8 weeks:	
HEc 210 Social Usage	1
HEc 304 Cloth. Prod. Dist. & Cons.	3
HEc 305 Struc. & Prop. Fibers	2
HEc 416 Present. Tech.	2
1 week New York City Fashion Tour and HEc 409 Field Exp. & Seminar in Clothing and Textiles	4
	12

Eighth Semester	
HEc 404 Creative Draping	3
HEc 405 Fabrics & Finishes	3
Home Ec. Elective	3
Electives	6
	15

* If required, Eng. 090, Math. 090, and/or Ed. El. 090 should be taken the first semester. Three, six, or nine semester hours of courses would be deferred to other semesters. The semester hours earned from these courses do not count towards the 128 semester hours needed for graduation.

Consumer Services — Food and Equipment Option

Completion of the Food and Equipment option leads to employment as home economists or consumer specialists by food or household equipment manufacturers, or by agencies serving the consumer.

This option emphasizes a study of food and equipment, communication and a broad overview of marketing, management, finance and accounting in the business world. The student participates in a supervised work experience in some aspect of the food and equipment area working for a manufacturer, retailer, consumer agency, utility company; or in food service, journalism, or other related experience.

Semester Sequence: Consumer Service Food and Equipment Option

First Semester*	S.H.	Second Semester	S.H.
HEc 100 Home Economics Orient.	1	HEc 101 Clothing & Man	3
HEc 111 Nutri. Ecol. of Man	3	HEc 121 Personal & Fam. Mgm't.	2
HEc 131 Intro to Ch. & Fam.	2	HPE 102 Physical Education	1
HPE 100 Health	2	Bio 101 Man & Bio World	4
HPE 101 Physical Education	1	Eng 112 Composition II	3
Psy 101 Intro to App. Psych.	3	Soc 111 Sociological Perspec.	3
Spc 101 Oral Communications	3		
	15		16
Third Semester		**Fourth Semester**	
HEc 215 Principles of Food	3	HEc 216 Food for the Family	3
Chem 101 Intro to Chem.	4	HPE 203 Physical Education	1
CIS 110 Intro to Accounting	3	Bus 130 Intro to Business	3
Econ 102 Micro-Econ	3	Chem 102 Organic & biochem.	4
General Ed. Elective	3	Ma 107 Computer Prog.	3
		Spc 201 Mass Media	3
	16		17
Fifth Semester		**Sixth Semester**	
HEc 321 Consumer Economics	3	HEc 323 Interior Environment	3
HEc 416 Present. techniques	2	HEc 418 Advanced Foods	3
Eng 313 Composition II	3	Art 241 Color and Design	3
Jour 100 Journalism	3	Ed 302 Audio-Visual Comm.	2
HEc 421 H'hld Eq. & Home Mgm't.	3	Bus 330 Marketing	3
General Ed. Elective	3	General Ed. Elective	3
	17		17
Seventh Semester		**Eighth Semester**	
HEc417 Survey of Nutrition	3	Phy 130 Household Physics	3
HEc Field Experience	3	Electives	12
Ed 420 Basic Photography	3		
Electives	6		
	15		15

* If required, Eng. 090, Math. 090, and/or Ed. El. 090 should be taken the first semester. Three, six, or nine semester hours of courses would be deferred to other semesters. The semester hours earned from these courses do not count towards the 128 semester hours needed for graduation.

Food Service or Dietetics

The Food Service or Dietetics Program prepares its graduates to become dietitians or supervisors in school, industrial, commercial, or institutional food service operations. The program also provides basic training for those interested in careers as nutritionists in public health agencies. A supervised field experience related to the student's career goal is required. The program is recognized by the American Dietetic Association as preparatory to an ADA approved internship. Upon successful completion of the total program one may become a Registered Dietitian.

Semester Sequence: Food Service or Dietetics

First Semester*	**S.H.**	**Second Semester**	**S.H.**
HEc 100 Home Economics Orient.	1	HEc 101 Clothing & Man	3
HEc 111 Nutri. Ecol. of Man.	3	HEc 121 Personal & Fam. Mgm't.	2
HEc 131 Intro. to Child & Fam.	2	HPE 102 Physical Education	1
HPE 100 Health	2	Chem 102 Organic & Biochem.	4
HPE 101 Physical Education	1	Psy 101 Intro to App. Psych.	3
Chem 101 Intro to Chemistry	4	Eng 112 Composition I	3
Spc 101 Oral Communication	3		
	16		16
Third Semester		**Fourth Semester**	
HEc 215 Principles of Food	3	HEc 216 Food for the Family	3
HPE 203 Physical Education	1	HEc 323 Interior Environ.	3
Bio 101 Man & Bio World	4	Bio 332 Physiology	4
MA 107 Intro. to Comp. Prog.	3	Ed 302 A-V Communication	2
Soc 111 Socio. Perspectives	3	General Ed. Elec.	6
General Ed. Elect.	3		
	17		18
Fifth Semester		**Sixth Semester**	
HEc 232 The American Family	3	HEc 315 Food Ser. Org. & Mgm't.	3
HEc 417 Survey of Nutrition	3	HEc 410 Diet Therapy	3
Chem 201 Biochemistry	4	General Ed. Elect.	6
Eng 313 Composition II	3	Elective	3
Psy 230 Ed. Psych	3		
Elective	2		
	18		15
Seventh Semester		**Eighth Semester**	
HEc 391 The Teach. of H.Ec.	3	HEc 321 Consumer Economics	3
HEc 411 Quantity Foods	4	HEc 418 Advanced Foods	3
HEc 412 Institu. Equipment	2	HEc 419 Field Experience for Food Ser. or Dietetics	3
Bio 343 Food Microbiology	4	Econ 101 Amer. Econ-Macro	3
		OR	
		Econ 102 Amer. Econ-Micro	3
		General Ed. Elec.	3
	13		15

* If required, Eng. 090, Math. 090, and/or Ed. El. 090 should be taken the first semester. Three, six, or nine semester hours of courses would be deferred to other semesters. The semester hours earned from these courses do not count towards the 128 semester hours needed for graduation.

Home Economics Education

Completion of the Home Economics Education Program satisfies the requirements for certification to teach home economics from nursery school through grade twelve in Pennsylvania schools and other states. Home Economics Education graduates are qualified to teach in both consumer-homemaking in middle, junior, and senior high school and in vocational-technical schools. Graduates are also employed as cooperative extension home economists, educational representatives for companies, and by governmental agencies serving families and children. For the home economics teacher, breadth and some depth study in the five areas of home economics includes child development and family relations, clothing and textiles, consumer education and management, food and nutrition and housing. Beginning in the junior year students majoring in Home Economics Education have professional experience in schools culminating in a semester during the senior year of student teaching.

Semester Sequence: Home Economics Education

First Semester*	S.H.	Second Semester	S.H.
HEc 100 Home Economics Orient.	1	HEc 121 Personal & Fam. Mgm't.	2
HEc 101 Clothing and Man	3	Psy 101 Intro to App. Psych.	3
HEc 111 Nutri. Ecology of Man	3	Spc 101 Oral Communication	3
HEc 131 Intro to Child & Fam.	2	Bio 101 Man & Bio World	4
Eng 112 Composition I	3	HPE Physical II	1
HPE Physical Education I	1	General Ed. Elective	3
General Ed. Elective	3		
	16		16
Third Semester		**Fourth Semester**	
HEc 215 Principles of Food	3	HEc 201 Fund. of Clothing	3
HEc 232 The American Family	3	HEc 216 Food for the Family	3
HPE 100 Health	2	HEc 231 The First Yrs. of Chld.	3
Chem 101 Intro to Chemistry	4	Chem 102 Organic & Biochem.	4
HPE Physical Education III	1	Psy 230 Educational Psych.	3
General Ed. Elective	3		
	16		16
Fifth Semester		**Sixth Semester**	
HEc 321 Consumer Economics	3	HEc 323 Interior Environment	3
HEc 391 Teaching of Home Ec. I	3	HEc 390 Observation and Partic.	3
Eng 313 Composition II	3	HEc 495 Vocational & Career Ed.	3
Ed 302 Audio-Visual Comm.	2	General Ed. Electives	9
General Ed. Electives	6		
	17		18
Seventh Semester		**Eighth Semester**	
HEc 392 Teaching Home Ec. II	3	Ed. 400 Student Teaching	12
HEc 421 H'hld Eq. & H. Mgm't.	3		
HEc Elective	3		
Ed 401 Hist & Phil of Ed.	3		
Elective	2		
General Ed. Elective	3		
	17		

* If required, Eng. 090, Math. 090, and/or Ed. El. 090 should be taken the first semester. Three, six, or nine semester hours of courses would be deferred to other semesters. The semester hours earned from these courses do not count towards the 128 semester hours needed for graduation.

Department of Music

Bachelor of Science in Music Education

The Bachelor of Science degree in Music Education is designed to develop public school music teachers who are intelligent and competent musicians, well-trained and competent educators, and well-informed citizens. Although the program is general in nature, preparing the graduate to teach both vocal and instrumental music at all levels of the public school, opportunity is given the individual student to specialize in either vocal or instrumental area, thereby meeting the need of the public school systems in their demand for specialization. The program attempts to provide a balance between general education, the intensive training necessary to develop a professional musician, and the background of professional study and experience necessary for entering the field of education in today's society.

Bachelor of Music

The Bachelor of Music degree provides the initial collegiate study for the development of the skills, concepts, and sensitivity essential to the preparation for the professional life of a musician. After successfully completing the degree, the graduate will have completed an important step in his development as a performer, composer and/or as a teacher in the area of his particular major competency. The program does not result in certification to teach in public schools, although by extending study beyond the normal eight semesters and by careful advisement, certification may be secured. Bachelor of Music candidates may major in piano, organ, voice, stringed instruments, woodwind instruments, brass instruments, percussion or music theory, history and literature.

The Bachelor of Music program is intended for students of superior musical ability. All applicants must demonstrate a high level of proficiency in performance, and accordingly will be required to pass an entrance audition in their major applied area. General scholarship, health and character requirements will be in accordance with existing college admissions policies.

Students who wish to enter the B.M. degree program with advanced standing from other programs at Mansfield State College will be expected to demonstrate the competencies and proficiencies which are appropriate to the level of the particular program for which they wish to be considered.

Bachelor of Music in Music Therapy

A career in Music Therapy offers challenge, opportunity, and special rewards to those interested in working with the handicapped. Children and adults who need therapy because of behavioral, learning, or physical disorders are helped by the use of music. Rehabilitation through the skill of a music therapist is needed in various places such as mental hospitals, geriatric centers, day care facilities, community health centers, and in the work special service agencies. Public schools are beginning to hire music therapists as members of special education staffs, especially those who hold music education certification. Some registered music therapists also open their own private studios where they work with children and adults who are referred to them by psychiatrists and other health professionals.

The Music Therapy program is a professional curriculum, the purpose of which is to prepare students to qualify as registered music therapists. This result is achieved through 4 years of academic residence and 6 months of internship under the supervision of a registered music therapist. At the same time, each student in this program will take a selection of general courses designed to broaden his intellectual horizons and to help create an informed, educated and responsible citizen.

Bachelor of Arts

The Bachelor of Arts degree with a major in Music is designed to provide a liberal education and a musical background sufficient for entering these occupations allied to

the musical world. For those who are not vocationally oriented, it provides an education in music sufficient for the enrichment of life which such knowledge of the art can bring.

Bachelor of Arts in Music Merchandising

The Music industry in the United States is a multi-million dollar operation requiring a knowledgeable personnel. The turnover of personnel in the music business is at a high level requiring a considerable number of qualified people to fill these positions. There are many hundreds of small businesses today dealing in the merchandising of music related goods and services. As long as the prevailing economic thinking in the United States embraces the free enterprise system, there should be no absence of career opportunities.

A graduate in this program in Music Merchandising will receive a broadly-based education. Students will develop skills in the areas of business and music, and will be able to avail themselves of a strong liberal arts education. They will be qualified to enter the field of business and industry and to meet the needs of the commercial world of music. A student graduating from this degree program should have a strong foundation in music and in business.

Bachelor of Arts in Jazz Studies

A career as a jazz musician offers unique opportunities for students who are prepared to compete and succeed in the environment of America's art form. The market for highly trained, versatile musicians is constantly changing but current trends place a premium on quality preparation.

Special Admissions Requirements

All applicants for a music degree, once they have satisfied the requirements for general college admission, must take an audition for acceptance into the music degree program. Acceptance is based upon a demonstration of both musical aptitude and musical accomplishment.

Musical aptitude is judged by —

1. The ability to sing in tune.
2. Rhythmic responsiveness.
3. Adequate melodic and rhythmic memory.

Musical accomplishment is measured by —

1. Sufficient proficiency on either Voice, Piano, Organ, Violin, Viola, Cello, Bass, Flute, Oboe, Clarinet, Bassoon, Saxophone, Trumpet, Horn, Trombone, Euphonium, Tuba, or Percussion to study standard literature. Voice majors should choose songs from standard vocal repertoire, chosen to display vocal potential as to range, voice quality, and interpretive ability. Instrumental majors should be prepared to play one or two compositions from standard literature showing contrasting styles plus selected scales and arpeggios. Sight reading is an integral part of each audition.
2. The ability to sing at sight a simple folk song type melody.
3. The ability to sing an alto, tenor, or bass part to a song equal in difficulty to "America."
4. The ability to play piano music, at sight, to the degree of difficulty of the first book of a standard graded course of piano instruction.
5. A working knowledge of the fundamentals of music theory such as scales, key and time signatures, and the terms and symbols of music notation.

Applicants who show superior qualifications on their major instrument may be accepted with a deficiency in one of the other areas, but will be expected to remove the deficiency within one school year.

Special permission to audition by a tape recording may be granted in unusual circumstances where long travel or personal hardship is involved. For information concerning this type of audition, contact the Chairperson of the Department of Music.

Transfer Students

Due to the time sequence necessary for the development of skills required by the music curriculum, students transferring into music are advised to transfer as early as possible. Otherwise, it becomes increasingly difficult to complete the curriculum within the normal four-year span of time.

Transfer credits in the music area must be validated by examination before they may be accepted for transfer. This is to insure that the student is capable of successfully completing the remaining courses which will be required of him/her.

Suggested Sequence of Courses: B.S. in Music Education

First Semester*	**S.H.**
Eng 112 Comp. I	3
MUS 122 Class & Rom.	2
HPE 101 Phys Ed I	1
MUS 111 Basic Music I	3
MUS 122 Class. & Rom. Music	2
SPC 101 Oral Comm	3
Applied Music	3
Major (1 s.h.)	
Secondary (2 s.h.)	
Chorus (everyone)	0
Band (inst. majors)	0
Orchestra (stg. majors)	0
	17

Second Semester	**S.H.**
HPE 100 Health	2
HPE 102 Phys Ed II	1
MUS 112 Basic Music II	3
MUS 123 Post Romantic & 20th	2
General Ed Electives	3-6
Applied Music	3
Major (1 s.h.)	
Secondary (2 s.h.)	
Chorus (everyone)	0
Band (inst. majors)	0
Orchestra (stg. majors)	0
	14-17

Third Semester	
MUS 213 Basic Music III	3
MUS 222 Medieval & Ren. Music	2
MUS 131 Eurhythmics I	1
HPE 103 Phys. Ed. III	1
APMU 112 Keyboard Skills I	1
General Ed. Electives	3-6
Applied Music	3
Major (1 s.h.)	
Secondary (2 s.h.)	
Chorus (everyone)	0
Band (inst. majors)	0
Orchestra (string maj.)	0
	14-17

Fourth Semester	
MUS 214 Basic Music IV	3
MUS 223 Baroque Music	2
MUS 132 Eurhythmics II	1
APMU 114 Keyboard Skills II	1
General Ed. Electives	6
Applied Music	3
Major (1 s.h.)	
Secondary (2 s.h.)	
Chorus (everyone)	0
Band (inst. majors)	0
Orchestra (string maj.)	0
	16

Fifth Semester	
MUS 331 Choral Conducting	2
MUS 381 Mus. Elem. School	2
MUS 311 Orchestration	2
ENG 313 Composition III	3
General Ed. Electives	3-6
Applied Music	3
Major (2 s.h.)	
Secondary (1 s.h.)	
Chorus (voice majors)	0
Band (inst. majors)	0
Orchestra (stg. majors)	0
	15-18

Sixth Semester	
MUS 332 Inst. Conducting	2
MUS 382 Music in Secondary	2
MUS 383 Inst. Music in Public	2
PSY 230 Education in Psychology	3
General Ed. Electives	3-6
Applied Music	3
Major (2 s.h.)	
Secondary (1 s.h.)	
Band (inst. majors)	0
Orchestra (stg. majors)	0
	15-18

(MUS 381, 382, 383, 311, 331, 332 may be taken either fifth or sixth semester)

Seventh Semester	
ED 400 Hist. & Phil. of Ed.	3
ED 302 Audio-Visual Comm.	2
General Ed. Electives	6-9
Applied Music	3
Major (2 s.h.)	
Secondary (1 s.h.)	
Chorus (voice majors)	0
Band (inst. majors)	0
Orchestra (stg. majors)	0
	14-17

Eighth Semester	
MUS 400 Student Teaching	12

(Seventh and Eighth Semesters may be alternated.)

* If required, Eng. 090, Math. 090, and/or Ed. El. 090 should be taken the first semester. Three, six, or nine semester hours of courses would be deferred to other semesters. The semester hours earned from these courses do not count towards the 128 semester hours needed for graduation.

Suggested Sequence of Courses: Bachelor of Music Instrumental Major

First Semester*	S.H.	Second Semester	S.H.
Mus 111 Basic Music I	3	Mus 112 Basic Music II	3
Mus 122 Class & Rom Mu Mus	3	Mus 123 Post-Rom & 20th Cent	3
Applied Major	4	Applied Major	4
Ensemble	1	Ensemble	1
General Ed.	5	Eng. 112 Comp I	3
Phys. Ed.	1	General Ed.	3
	17		17

Third Semester	
Mus 213 Basic Music III	3
Mus 222 Medieval & Ren.	3
Applied Major	4
Secondary Applied	2
Ensemble	1
Mus 131 Eurhythmics I	1
SPC 101 Oral Comm	3
	17

Fourth Semester	
Mus 214 Basic Music IV	3
Mus 223 Baroque Music	3
Applied Major	4
Secondary Applied	2
Ensemble	1
Mus 123 Eurhythmics II	1
Phys Ed	1
Humanities Elect.	3
	18

Fifth Semester	
Major Applied	4
Secondary Applied	2
Ensemble	1
Keyboard Lit.	2
Theory, Hist. Elect.	2
Misc. Mus. Elect.	2
Eng 313 Comp II	3
	16

Sixth Semester	
Major Applied	4
Secondary Applied	2
Ensemble	1
Keyboard Lit.**	2
Theory, Hist. Elect.	2
Misc. Mus. Elect.	2
Humanities Elect.	3
	17

**Keyboard majors Only

Seventh Semester	
Major Applied	4
Ensemble	1
Theory, Hist. Elect.	2
Misc. Music Elect.	3
Social Science Elect.	3
	13

Eighth Semester	
Ensemble	1
Major Applied	4
Theory, Hist. Elect.	2
Social Science Elect.	3
Free Electives	3
	13

* If required, Eng. 090, Math. 090, and/or Ed. El. 090 should be taken the first semester. Three, six, or nine semester hours of courses would be deferred to other semesters. The semester hours earned from these courses do not count towards the 128 semester hours needed for graduation.

Suggested Sequence: Bachelor of Music Major in Voice

First Semester*	**S.H.**
Mus 111 Basic Music I	3
Mus 122 Class & Rom. Mus.	3
Voice	4
Secondary Applied	1
Ensemble	1
Language	3
	15

Second Semester	**S.H.**
Mus 112 Basic Music II	3
Mus 123 Post-Rom & 20th Cent	3
Voice	4
Secondary Applied	1
Ensemble	1
Eng 112 Comp	3
Language	3
	18

Third Semester	
Mus 213 Basic Music III	3
Mus 122 Medieval & Ren	3
Voice	4
Applied	1
Ensemble	1
Eurhythmics I	1
Humanities Elect	3
	16

Fourth Semester	
Mus 214 Basic Music IV	3
Mus 223 Baroque Music	3
Voice	4
Applied	1
Ensemble	1
Eurhythmics II	1
Humanities Elect	3
	16

Fifth Semester	
Voice	4
Secondary Applied	1
Ensemble	1
Song Lit.	3
Misc. Mus. Elect.	2
Eng 313 Comp II	3
Phys Ed	1
	17

Sixth Semester	
Voice	4
Secondary Applied	1
Ensemble	1
Theory, Hist., Elect.	2
ArtH 101 Intro to Art	3
Phys Ed	1
	14

Seventh Semester	
Voice	4
Secondary Applied	1
Ensemble	1
Theory Hist. Elect.	2
Misc. Mus. Elect.	2
Social Sci. Elect.	3
Free Elective	3
	16

Eighth Semester	
Voice	4
Secondary Applied	1
Ensemble	1
Theory Hist. Elect.	2
Misc. Mus. Elect.	2
Social Sci. Elect.	3
Free Elective	3
	16

* If required, Eng. 090, Math. 090, and/or Ed. El. 090 should be taken the first semester. Three, six, or nine semester hours of courses would be deferred to other semesters. The semester hours earned from these courses do not count towards the 128 semester hours needed for graduation.

Suggested Sequence of Course: Bachelor of Music Theory-History-Literature Major

First Semester*	S.H.
Applied Major	4
Ensemble	1
Mus 111 — Basic Music I	3
Mus 122 — Classical & Rom	3
HPE 101 — Physical Education	1
Language or General Education	3
	15

Second Semester	S.H.
Applied Major	4
Ensemble	1
Mus 112 — Basic Music II	3
Mus 123 — Post Rom & 20th Century	3
Eng 112 — Composition I	3
HPE 101 — Physical Education	1
Language or General Education	3
	18

Third Semester	
Applied Major	4
Secondary Applied	2
Ensemble	1
Mus 213 — Basic Music III	3
Mus 222 — Medevial & Ren.	3
Mus 131 — Eurhythmics I	1
Humanities or Social Science Elective	3
	17

Fourth Semester	
Applied Major	4
Secondary Applied	2
Ensemble	1
Mus 214 — Basic Music IV	3
Mus 223 — Baroque Music	3
Mus 132 — Eurhythmics II	1
Humanities or Social Science Elective	3
	17

Fifth Semester	
Ensemble	1
Applied Major	4
Secondary Applied	2
History-Theory Elective	3
Mus 316 — Counterpoint	3
Eng 313 — Composition II	3
	16

Sixth Semester	
Applied Major	4
Secondary Applied	2
Ensemble	1
History-Theory Elective	3
Humanities or Social Science Elective	3
Language or General Elect.	3
	16

Seventh Semester	
Ensemble	1
Music Elective	3
Humanities or Social Science Elective	3
Language or General Educ.	6
Free Elective	3
	16

Eighth Semester	
Ensemble	1
History-Theory Elective	3
Music Elective	3
Language or General Educ.	3
ArtH 101 — Intro to Art	3
Language or General Educ.	3
	16

* If required, Eng. 090, Math. 090, and/or Ed. El. 090 should be taken the first semester. Three, six, or nine semester hours of courses would be deferred to other semesters. The semester hours earned from these courses do not count towards the 128 semester hours needed for graduation.

Suggested Sequence of Courses: Music Merchandising

First Semester*	S.H.
SPC 101 Oral Communication	3
HPE 100 Health	2
HPE 101 Physical Education	1
MUS 122 Classic & Romantic	2
MUS 111 Basic Music I	3
Piano	1
Applied Major	1
APMU 101 Voice Class	1
Electives	3
Ensemble	0
	17

Second Semester	
ENG 112 Composition II	3
HPE 101 Physical Education	1
MUS Hist-Lit Elect	2
MUS 112 Basic Music II	3
BUS 130 Intro Bus & Man	3
ACC 110 Prin of Acc I	3
Piano	1
Applied Major	1
Ensemble	0
	17

Third Semester	
CIS 105 Prog & Info Proc	3
ACC 111 Prin of Acc II	3
Applied Major	1
Instrumental Class	1
Ensemble	0
Electives	9
	17

Fourth Semester	
HPE 101 Physical Education	1
ACC 215 Managerial Acc	3
Applied Major	1
Instrumental Class	1
Ensemble	0
Electives	12
	18

Fifth Semester	
ENG 313 Composition III	3
BUS 330 Marketing	3
SOC 111 Sociological Persp	3
MUS 383 Instrumental Methds	2
Applied Major	1
Ensemble	0
Electives	5
	18

Sixth Semester	
BUS 340 Finance or ECON 122 Micro Econ	3
Applied Major	1
Instrumental Class	1
Ensemble	0
Electives	12
	17

Seventh Semester	
BUS 410 Business Law/Ethics	3
Applied Major	2
Instrument Class	1
Music Merchandising	3
Electives	9
	18

Eighth Semester	
Internship	6

* If required, Eng. 090, Math. 090, and/or Ed. El. 090 should be taken the first semester. Three, six, or nine semester hours of courses would be deferred to other semesters. The semester hours earned from these courses do not count towards the 128 semester hours needed for graduation.

Suggested Sequence of Courses: Music Therapy

First Semester**	**S.H.**
HPE 100 Health	2
HPE 101 Phys Ed I	1
MUS 111 Basic Music I	3
MUS 122 Classic & Rom	2
SPED 101 Intro to Excep. Child	3
General Elect.	3
Applied Music	3
	17

Second Semester	**S.H.**
ENG 112 Composition I	3
HPE 101 Phys Ed (dance)	1
MUS 112 Basic Mus II	3
MUS 123 Post Rom & 20th Cent.	2
PSY 101 Intro App. Psy.	3
Applied Music	3
MTH 271 Therapy Orient	2
	17

Third Semester	
MUS 213 Basic Music III	3
MUS 113 Keyboard Skills	1
MUS 131 Eurhythmics I	1
MTH 310 Practicum	1
Applied Music	2
Ensemble	1
Soc/Anth Gen. Ed. Elect.	3
Gen. Ed. Elect.	3
	15

Fourth Semester	
MUS 214 Basic Mus IV	3
MUS 114 Keyboard Skills II	1
MUS 132 Eurhythmics II	1
SPC 101 Oral Comm	3
Mus. Hist. Elect.	2-3
Applied Music	3
Ensemble	1
HPE 101 Phys Ed III	1
	15-16

Fifth Semester	
MUS 331 Choral Cond	2
PSY Psychology Elect	3
MTH 372 Psy-Soc. Found. of Music I	2
ENG 313 Composition III	3
MTH 311 Practicum	1
Gen. Ed. Elect.*	3
Applied Music	1
Ensemble	1
	16

Sixth Semester	
PSY 360 Abnormal Psy	2
MTH 373 Psy-Soc Found of Music II	2
MUS 311 Orchestration	2
Soc/Anth Gen. Ed. Elect	3
Applied Music	3
Ensemble	1
Gen. Ed. Elect	3
	16

Seventh Semester	
MTH 471 Influence of Music on Behavior	3
PSY Psy. Elective	3
HPE 101 Phys Ed IV	1
MTH 312 Practicum	1
General Ed. Elect	6
Applied Music	1
	15

Eighth Semester	
MTH 472 Music in Therapy	3
Gen. Elect	12-14
Applied Mus	1
	16-18

* At least one Humanities course must be taken outside the area of Music.

** If required, Eng. 090, Math. 090, and/or Ed. El. 090 should be taken the first semester. Three, six, or nine semester hours of courses would be deferred to other semesters. The semester hours earned from these courses do not count towards the 128 semester hours needed for graduation.

Suggested Sequence of Courses: Jazz

First Semester*	S.H.
Mus 111 Basic Music I	3
Mus 122 Classic & Rom	3
APMU 111 Piano	1
ENMU 166 Jazz Band	0
Applied Major	1
Mus 224 Intro to Jazz	3
General Ed.	6
	16

Second Semester	S.H.
Mus 112 Basic Music II	3
Mus 123 Post Rom & 20th	2
APMU 210 Piano	1
ENMU Jazz Band	0
Applied Major	1
APMU 115 Improv I	2
General Ed.	6
	16

Third Semester	
Mus 213 Basic Music III	3
APMU 116 Fund. of Jazz Improv. II	2
ENMU Jazz Band	0
Applied Major	1
APMU 113 Keyboard SKills I	1
Elect. Ens.	0
General Ed.	6
	13

Fourth Semester	
Mus 214 Basic Music IV	3
Mus 225 Jazz Styles	3
APMU 117 Advanced Jazz Improv. I	2
ENMU 166 Jazz Band	0
Applied Major	1
APMU 114 Keyboard Skills II	1
General Ed.	6
	16

Fifth Semester	
APMU 118 Advanced Jazz Improv. II	2
Mus 312 Jazz Arranging I	2
ENMU 166 Jazz Band	0
Mus 324 Jazz Ens. Mat. & Tech	2
Applied Major	2
Mus 332 Inst. Conducting	2
Elect. Ensembles	0
Gen. Education	4
	14

Sixth Semester	
ENMU 166 Jazz Band	0
ENMU 370 Small Jazz and Comm. Ens.	1
Applied Major	2
APMU 260 Percussion Class	1
Elect. Ens.	0
Mus 313 Jazz Arranging II	2
Gen. Education	6
	12

Seventh Semester	
APMU 151 String Class	1
ENMU 166 Jazz Band	0
Applied Major	2
APMU 154 Guitar	1
Elect. Ens.	0
General Ed.	9
APMU 142 Trombone Class	1
	14

Eighth Semester	
APMU 140 Trumpet Class	1
ENMU 166 Jazz Band	0
Applied Major	2
General Ed.	9
APMU 135 Saxophone Class	1
	13

Total above is 114 hours. Fourteen credits of core requirements and/or electives must be added.

* If required, Eng. 090, Math. 090, and/or Ed. El. 090 should be taken the first semester. Three, six, or nine semester hours of courses would be deferred to other semesters. The semester hours earned from these courses do not count towards the 128 semester hours needed for graduation.

Department of Secondary Education

The Secondary Education Curriculum has as its primary purpose the preparation of men and women to teach in secondary schools. It offers a broad-based general education supported by the principles of student choice, advisement, and distribution among disciplines. This provides prospective teachers with a variety of experiences geared toward developing an appreciation of the process of education.

The Secondary Education Curriculum is a four-year program leading to the Bachelor of Science in Education degree. This curricular function is the combined responsibility of the Secondary Education Department and the appropriate academic departments. Therefore, each student who is a secondary education major functions under a system of dual advisement. Under this system, an adviser from the Secondary Education Department assists the student in satisfying completely his certification, while an adviser from his chosen discipline guides him in his area of specialization.

Completion of requirements for the Bachelor of Science in Education degree, with emphasis in secondary education, indicates that the prospective teacher is competent in his knowledge of content in the four major components of the secondary curriculum: general education, area of specialization, professional education, and field experiences.

General education has as its goal a broad-based liberal education designed to foster individual fulfillment and to prepare citizens for active participation in a democratic society.

Area of Specialization has as its goal a concentration of courses designed to provide a student with depth and expertise in a specific subject area. This component is the primary responsibility of the academic departments, and programs are developed by interdepartmental cooperation.

Professional education has as its goal the preparation of teachers in the science and art of pedagogy. Courses relating to schools as social institutions, characteristics of learners and learning, and understanding teaching methodology are offered.

Field experience has as its goal the application of knowledge and skills acquired in professional preparation. The Secondary Education Curriculum offers observation and participation in several dimensions, culminating in a semester of student teaching.

A student who completes the program will graduate with a provisional certificate to teach in the secondary schools of the Commonwealth of Pennsylvania.

Certification programs include communication arts (speech/English); foreign language (French, German, Spanish); mathematics; physics/mathematics; science (biology, chemistry, earth and space, general, physics); and social studies comprehensive which provides emphases in geography, history, political science, and sociology/anthropology.

However, all prerequisites leading toward certification must be met prior to program completion. Under normal procedures transfer students should complete their certification program with two years of study at Mansfield State College.

The recommended professional semester sequence for all Secondary certification programs includes the following twenty-nine semester hours:

	Freshman Year
Ed 111	SEPEP I (Secondary Education Professional Experience Program) — 1 credit
	Sophomore Year
Ed 211	SEPEP II (Secondary Education Professional Experience Program) — 1 credit
	Junior Year
Ed 411	SEPEP IV (Secondary Education Professional Experience Program) — 1 credit

Junior/Senior Year

Psy 230	Education Psychology — 3 credits
Ed 300	Secondary School Methods — 3 credits
Ed 301	Evaluative Techniques — 2 credits
Ed 302	Audio-Visual Communication — 2 credits
Ed 311	SEPEP III (Secondary Education Professional Experience Program) — 1 credit
Ed 401	History and Philosophy of Education — 3 credits

Senior Year

Ed 400	Student Teaching — 12 credits

It is recommended that Ed 111, Ed 211, Ed 311, Ed 411, Psych 230, Ed 301, and Ed 302 be completed before student teaching, with Ed 300, Secondary School Methods, required as a prerequisite to student teaching.

Public School Nursing

The Public School Nursing Program, under the aegis of the Department of Secondary Education, leads to the degree of Bachelor of Science in Education and is designed to provide the necessary preparation for a registered nurse seeking certification to serve in public schools of Pennsylvania.

Believing that the school nurse is primarily a teacher-nurse, stress in the program is given to the development of competent educators and informed citizens. Admission to degree candidacy reflects: (1) the satisfactory completion of a three-year curriculum in an approved school of nursing, (2) registration by the State Board of Examiners for the registration of nurses of Pennsylvania, (3) completion of an approved program at the College of sixty-seven semester hours of additional work as detailed below. *Completion of the program and endorsement by the College will result in an Education Specialist 1 Certificate.

* Required courses include the following:

In Geneal Education, Spc 101, Eng. 230, one literature course, Hist 104, Psy 360, Ma 105, and Soc 111. In Professional Education, Ed 401, Psy 230, Psy 240, EdEl 350, Sp Ed 101, PSN 206, PSN 307, and PSN 306. In PSN Specialization, PSN 300, PSN 301, PSN 302, PSN 304, PSN 305, HEc 111, and PSN/BIO 309.

For further information regarding the Public School Nursing Program, contact:

Chairperson
Department of Secondary Education
Retan Center

Department of Sociology and Social Work

The Department of Sociology and Social Work emphasizes a concern for the quality of life available in modern society with a focus on improving social conditions. Additional emphasis is placed on understanding and developing rural communities and resources for present and future human needs.

A unique feature of the work offered in the Department of Sociology and Social Work is the emphasis on the application theory by work and study within a community. Thus, students are offered a variety of opportunities to explore their community interests and concern, and to share their experiences in the classroom.

The Department of Sociology and Social Work offers two degree programs for students with career interests in the study of social systems and the skills needed to facilitate desired changes.

B.A. In Sociology and Anthropology

The B.A. program in Sociology and Anthropology seeks to provide men and women with both a professional and an intellectual foundation. With half of the required courses

in the major open to election, individualized programs are the rule. Those majoring in this field are encouraged to consider focusing their overall studies on one or two professional areas. The work provides an adequate basis for advanced training in law, ministry, journalism, social work, or sociology, or anthropology. The opportunity exists for students to spend a semester on an intership in a professional or business organization as part of their college program.

Specific requirements for the B.A. degree are successful completion of SOC 111, SA 412 or SA 421, SA 451, and ANTH 111 and 304. Five electives from among other sociology and anthropology courses are to be chosen in consultation with departmental advisors. The total requirements are thirty semester hours within the department.

Suggested Semester Sequence[1]: B.A. in Sociology and Anthropology

First Semester**		**Second Semester**	
SOC 111* Sociological Perspectives	3	SOC 121 Contemp Soc Prob	3
ANTH 101* Cultural Anthropology	3	ECON 101 American Economy	3
BIO 101 Man & Biological World	4	BIO 102 Contemporary Problems	3
ENG 112* Composition I	3	SPC 101* Oral Communication	3
Elective (Language or Math)	3	Elective — (Language or Math)	3
HPE 101* Physical Education	1	HPE 102* Physical Education	1
	17		16
Third Semester		**Fourth Semester**	
SOC 302 Community	3	SOC 232 American Family Systems	3
ECON 204 Hist of Econ Thought	3	PSCI 210 Contemporary Issues in World Affairs	3
PSY 101 Intro to Psychology	3	PSY 310 Social Psychology	3
HPE 100* Health	2	PHIL 230 Intro to Logic	3
Elective — (Language or Math)	3	Elective — (Language or Math)	3
Elective — (Sociology)	3		
HPE 103* Physical Education	1		
	17		16
Fifth Semester[2]		**Sixth Semester[2]**	
SOC 303 Social Research I	3	SOC 304 Social Research II	3
MATH 105 Statistics	3	SOC 203 Organizational Behavior	3
ENG 313* Composition II	3	SOC 421* Urban Society	3
Elective (Anthropology)	3	Elective (Anthropology)	3
Elective (Humanities)	3	ENG 232 Folklore	3
	15		15
Seventh Semester		**Eighth Semester**	
SOC 451* Social Planning	3	SOC 340 Documentary Photography	3
ED 420 Basic Photography	3	SOC 497 Independent Study	3
ENG 240 Journalism	3	ENG 335 Creative Writing	3
Electives (Sociology)	6	Elective (Sociology)	3
Elective (History or Psychology)	3	Elective (History or Psychology)	3
	18		15

[1]Note: This suggested program is of general liberal arts nature. Considerable variation is possible for students with specific interests. The only required courses are those where an asterisk follows the course number.

[2]Note: The Junior year may include a foreign study program in a country where the foreign language studied is spoken. Special schedules for this option are arranged individually with the student's faculty advisor.

** If required, Eng. 090, Math. 090, and/or Ed. El. 090 should be taken the first semester. Three, six, or nine semester hours of courses would be deferred to other semesters. The semester hours earned from these courses do not count towards the 128 semester hours needed for graduation

Bachelor of Science Degree
Social Work

The Department of Sociology and Social Work trains professional Social Workers using a multi-disciplinary Liberal Arts Curriculum base with the opportunity to specialize in rural areas. A fifteen hour internship is available to provide on the job learning of skills that Social Workers use to assist others.

Graduates of the Social Work Program qualify to take the Pennsylvania Civil Service test for caseworker and are employed by Child Welfare, Drug and Alcohol, Mental Health, Probation and Aging programs. Graduates are also employed by social organizations such as Settlement Houses, halfway houses and group homes, YM and YWCA, Community Centers and Community Action Programs, Youth outreach and recreation programs, hospital and medical settings.

The Social Work Program provides training in effective work with individuals, groups and communities. Students are encouraged to elect additional coursework from the many human service programs available.

Recommended Semester Sequence: Bachelor of Science Degree Social Work

First Semester*	**S.H.**	**Second Semester**	**S.H.**
HPE 100 Health	2	BIO 101 Man & Bio World	4
Physical Education I	1	ENG 112 Composition I	3
SWK 101 Human Services	3	SOC 121 Contemp. Soc. Prob.	3
SOC 111 Social Perspectives	3	Anth 101 Cultural Anth.	3
GEOG 102 Human Geography	3	General Education/Free Elective	3
SPC 101 Oral Communication	3	Physical Education II	1
	15		17
Third Semester		**Fourth Semester**	
SWK 241 Intro. Soc. Wk.	3	HIST 315 Evol. Soc. Welfare	3
SOC 203 Organizational Behav.	3	MATH 105 Statistics	3
Psych 101 Intro to Appl of Psy	3	CIS 101 Computers in Society	3
Physical Education III	1	General Education/ Free Electives	9
General Education/ Free Electives	6-8		
	16-18		18
Fifth Semester		**Sixth Semester**	
SWK 449 Casework	3	SWK 450 Groupwork	3
SOC 303 Research Methods	3	General Education/ Free Electives	9
Gen Ed/Free Electives	9		
ENG 313 Composition II	3		
	18		18
Seventh Semester		**Eighth Semester**	
SWK 441 Organizational Internship (may be arranged summer following completion of junior or senior year) (recommended)	8-15	SWK 451 Social Planning	3
		SWK 453 Senior Seminar (Pending approval)	3
		General Education/ Free Electives	12
	15		18

* If required, Eng. 090, Math. 090, and/or Ed. El. 090 should be taken the first semester. Three, six, or nine semester hours of courses would be deferred to other semesters. The semester hours earned from these courses do not count towards the 128 semester hours needed for graduation.

Additional courses recommended to be scheduled when available

Select 6 hours from	**credits**
SOC 222 Sociological Aspects of Aging	3
SOC 232 American Family Systems	3
SOC 306 Sociology of Religion	3
SOC 430 Deviance, Delinquency & Crime	3
SOC 460 Sociology of Health & Medicine	3
Select 3 hours from	**credits**
SWK 454 Employment Counseling	3
S/A 321 Futuristic Society	3
ANTH 304 Studies in Major Cultural Systems	3
Select 3 hours from	**credits**
SOC 302 Community	3
S/A 412 Rural Community	3
S/A 421 Urban Society	3

Department of Special Education

This program is designed for the professional preparation of competent Special Education teachers for children who are exceptional. The program leads to a Bachelor of Science in Education Degree and K-12 teacher certification in Mentally and Physically Handicapped (M/PH). The M/PH certification provides entry-level qualifications for teaching the brain injured, learning disabled, mentally retarded, physically handicapped, and socially-emotionally disturbed.

The program is competency-based and considers the cross categorical trend in Special Education, rather than focusing on specific handicaps. It develops generic teaching competencies for working with mentally and/or physically handicapped children in various educational settings.

Students major in Mentally/Physically Handicapped and choose 10 semester hours of related electives in such areas as Early Childhood, Elementary, or Secondary Special Education, Disadvantaged, and Severely/Profoundly Retarded. Upon meeting the competency criteria in the program, graduates will be qualified for such professional positions as:

Special Class Teachers
Resource Room Teachers
Itinerant Specialists
Home Instruction Teachers

Graduates also go into related settings in institutions and agencies serving the handicapped, or advanced graduate study in Special Education or related fields.

The curriculum develops competencies needed in appraising the nature and origin of learning problems among exceptional children and youth. It considers appropriate school adjustments needed for these children and youth with emphasis on diagnostic and perscriptive teaching skills. New legislation and individualized education programming are focal points in the program. To enhance the theoretical phases of the curriculum, provisions are included as early as the Freshman/Sophomore year for students to get observation and field experience in such special education settings as the following:

Intermediate Unit 17 Special Classes
(Bradford, Lycoming, Sullivan, Tioga Counties)
Northern Tier Learning and Diagnostic Center
Martha Lloyd School, Troy, Pennsylvania
The Laurelton and Selinsgrove Centers
Partners in Progress Sheltered Workshop
The Elmira Psychiatric Center

In addition, four to six practicum sites are available on campus. Lower division students tentatively interested in this major should include the following in their first two years of General Education: Psy. 101, 230, SpEd 100, 101, 201, and, with advisement, any elective courses related to specific areas of interest. Curriculum requirements for the major are as follows:

SpEd 100, 101, 201, 301, 302, 303, 340, 345, 400, 410, and 490. Plus 10 semester hours of Major/Major Related Electives.

The program also offers elective courses to students in other majors in order to provide prospective teachers and others with a working orientation to handicapped children who must be provided for (Mainstreamed) in regular elementary and secondary classrooms and related settings. Included are such courses as SpEd 101, 301, 310, 320, 330, 340, 360, and 490. Para-professional (teacher aide) training projects are also provided by the department. Course options are also available for those wishing to work in child advocacy, group homes, MH/MR, and sheltered workshops.

Generally, junior college and other advanced transfer students may be sequenced into this major with a minimum of difficulty. Interested transfer students should contact the department chairperson for an evaluation of their transcripts and further information.

Recommended Semester Schedule: Special Education Major Mentally/Physically Handicapped

First Semester* **	**S.H.**	**Second Semester**	**S.H.**
SPED 100 Pre-prof Exp	2	HPE 100 Health	2
HPE 101 Phys Ed I	1	ENG 112 Comp I	3
SPC 101 Oral Comm	3	ART 101* Intro Art	3
PSY 101 Intro App of Psy	3	HPE 102 Phys Ed II	1
BIO 101* Man Bio World	4	SPED 101 Intro Exc Child	3
MA 101* Fund Conc Math	3	BIO 102* Contemp Bio Prob	3
		MA 105* Intro Stat	3
	16		18
Third Semester		**Fourth Semester**	
PSY 230 Educ Psych	3	SPED 201 Ment/Phys Handic	3
HPE 203 Phys Ed III	1	GEOG 102* Human Geog	3
HIST 202* Am Hist to Present	3	GEOL 122* Historical Geol	3
MUS 100* Intro to Music	3	PHIL 201* Intro to Philo	3
ENG 225* Eng Grammar	3	GE Gen Ed Electives	3-4
GE Gen Ed Elective	3		
	16		15-16
Fifth Semester**		**Sixth Semester****	
SPED 340 Educ Emot Dist	3	ENG 313 Comp II	3
SPED 301 Curr Adj SpEd	3	SPED 302 Diag & Corr Tchg	3
EDEL 383 Tchg Reading	3	SPED 303 Obs & Partic	3
EDEL 350 Child Dev	3	EDEL 384 Tchg Math	3
ED 301 Eval Techniques	2	ED 302 Audio-Vis Comm	2
Req/Electives	3-4	SPED 345 Beh Mod	3
	17-18		17
Seventh Semester**		**Eighth Semester****	
SPED 401 Tchg Elem SpEd (or 402, 03, 04)	3	SPED 400 Student Teaching SpEd (two ½ sem. assignments)	12
SPED 410 Prof Sem SpEd	2		
ED 401 Hist & Phil of Ed	3		
SPED 490 Lrng Disabilities	3		
Req/Electives	4		
	15		12

NOTES:

(1) *Areas of Concentration* are available in Early Childhood Sp. Ed., Elementary Sp. Ed., or Secondary Sp. Ed. (Career Ed./Work Study) via electives.

(2) *Special Interest Areas* are Mentally Gifted in conjunction with the El. Ed. Department and Psychology via electives.

* Recommended courses (substitutions permitted with adviser's approval)

** 5th, 6th, 7th, and 8th semesters may be alternated as feasible. Take SPED 100 Fall or first semester at MSC; must be taken before SPED 101.

*** If required, Eng. 090, Math. 090, and/or Ed. El. 090 should be taken the first semester. Three, six, or nine semester hours of courses would be deferred to other semesters. The semester hours earned from these courses do not count towards the 128 semester hours needed for graduation.

Bachelor of Science Degree Option — Exceptional Persons

The Bachelor of Science Option Program is designed to offer an optional non-teaching/certification, 129 semester hour Bachelor of Science Degree in Special Education, Major: Exceptional Persons. The program permits those with professional goals of a non-teaching nature to obtain Bachelor of Science degree specialization for working with the handicapped in human service careers. It is designed to develop entry-level professional competencies for such career areas as 1. Child Advocacy, 2. Group Homes, 3. Institutions and Private Facilities for the Handicapped, 4. Management of Special Programs for the Handicapped, 5. MY/MR Work, and 6. Sheltered Workshops. Graduates will be eligible to apply for various entry-level Civil Service classifications.

Recommended Semester Schedule: Special Education Major
Exceptional Persons

First Semester***	**S.H.**	**Second Semester**	**S.H.**
SPED 100* Pre-prof Exp	2	HPE 100 Health	2
HPE 101 Phys Ed I	1	ENG 112 Comp I	3
SPC 101 Oral Comm	3	HEC 111 Nutr. Ecol Man	3
PSY 101* Intro App Psy	3	HPE 102 Phys Ed II	1
BIO 101 Man Bio World	4	SPED 101* Intro Ex Child	3
MA 101 Fund Conc Math	3	BIO 102 Contemp Bio Prob	3
		MA 107 Intro Comp Prog	3
	16		18
Third Semester		**Fourth Semester**	
ART 271 Ceramics I	3	SPED 201* Ment/Phys Handic	3
HPE 203 Phys Ed III	1	ART 345 Fibers	3
GEOL 122 Historical Geol	3	PHIL 201 Intro to Philo	3
ENG 225 Eng Grammar	3	Gen Ed Electives	6-9
Gen Electives	6		
	16		15-18
Fifth Semester**		**Sixth Semester****	
SPED 340* Ed of Emo Dist	3	ENG 313 Comp II	3
SPED 310* Comm Disorders	3	SPED 355* Selected Topics	3
SPED 304* Prac. Arts for Ex. Ind	3	SPED[1] 375* Residential Fac Handi	3
HPE 340 Safety & First Aid	3	SPED 345* Beh Mod	3
Req/Electives	3-6	PSY 311 Intro Small Grps	3
		PSY 322 Gero'al Psy	3
		OR	
		HEC 336 Adulthd & Aging	
	15-18		18

Seventh Semester**	S.H.	Eighth Semester**	S.H.
SPED[1] 376* Normalization	3	SPED 450* Field Experience	12
SWK 452 Comm Organ	3		
ED 401 Hist & Phil	3		
Gen Electives	6-9		
	15-18		12

* Required courses (substitutions permitted with adviser's approval)

** 5th, 6th, 7th, and 8th semesters may be altered as feasible. Take SPED 100 Fall or first semester at MSC; must be taken before SPED 101.

*** If required, Eng. 090, Math. 090, and/or Ed. El. 090 should be taken the first semester. Three, six, or nine semester hours of courses would be deferred to other semesters. The semester hours earned from these courses do not count towards the 128 semester hours needed for graduation.

[1]Pending approval

Department of
Speech Communication and Theatre

THE COMMUNICATIONS PROGRAM at Mansfield State College is about people learning to understand themselves and others. Most of the problems facing the world today stem from a lack of effective communication. While solutions to these problems seem complex, they are possible when people learn how to communicate more effectively.

The Department serves four basic groups of undergraduate students:

1. Those who plan to go on to graduate work.
2. Those who plan to teach and direct Speech, Theatre, and English activities in the secondary school.
2. Those who wish a sound basic training in the area of communications or theatre who intend to pursue a career in activities related to the fields of speech, broadcasting, theatre, or public relations.
3. Those who are simply in Speech Communication and/or Theatre as a humanistic discipline just as they might major in English or History.

Students may earn either Bachelor of Arts or the Bachelor of Science in Education degree depending upon their course of study. The career possibilities are varied and abundant. One possibility is teaching in the secondary schools. It is required that any level student who plans to teach within the discipline on the secondary level must pursue the special course of study leading to certification in communications. Approved certification indicates that the recipient is qualified to teach Speech, Theatre, and English courses. Beyond the profession of teaching, career possibilities abound. Broadcasting, journalism, editing, sales, public relations demand direct application of communication skills. Many companies and corporations seek specialists with communications backgrounds. The specific skills stressed in communications programs are needed by almost all fields of employment.

THE SPEECH CORE PROGRAM FOR B.A. consists of 15 credit hours of required courses including Public Speaking, Oral interpretation, Voice and Articulation, Argumentation and Debate, and Communication Theory. Students who wish to pursue an emphasis in broadcasting within the Speech Communication major should take 24 credit hours of courses including Mass Media, Television Production, Television Program Design, Radio Production and Management, Voice and Articulation, and Communication Theory, as well as specified writing courses such as Journalism, News Reporting, etc.

Students who elect the Public Relations emphasis will take Mass Media, Journalism, Media Design, Public Speaking, Photography, Intro to Public Relations, Public Relations, Public Relations Workshop, Communication Theory, and Persuasion.

The Theatre Core Program for the B.A. consists of 26 credit hours of required courses including Stagecraft, Acting, Makeup, Dance, Directing, Theatre History I and II, Play Structure and Analysis and Theatre Workshop.

Students in all of the above programs will have the opportunity to elect an internship for from 6 to 15 credits. This course is designed to give the student pre-professional experience in his chosen career and is taken off-campus in the seventh or eighth semester.

The BSE Communications requires 6 hours of theatre, 21 hours of speech, and 24 hours of English courses; nine of which are restricted electives. Students in the BSE program are also required to take 30 hours of education courses, 12 of which are structured teaching experience. It is required that these students also demonstrate second year proficiency in a foreign language.

The Speech Communication and Theatre Department strongly recommends a close association between students and faculty advisors.

Suggested Sequence of Courses: Speech

First Semester*	**S.H.**	**Second Semester**	**S.H.**
Eng 112	3	HPE 102	1
HPE 100	2	General Education/Electives	14-17
HPE 101	1		
SPC 101	3		
General Education/Electives	6-9		
	15-18		15-18

Third Semester		**Fourth Semester**	
HPE 203	1	Spc 200	3
Spc 203	3	General Education/Electives	12-15
Spc 204	3		
General Education/Electives	8-11		
	15-18		15-18

Fifth Semester		**Sixth Semester**	
Spc 305 or 207	3	Spc 400	3**
Eng 313	3	General Education/Electives	12-15
General Education/Electives	9-12		
	15-18		15-18

**Must take prior to internship.

Seventh Semester	**S.H.**	**Eighth Semester**	**S.H.**
Internship OR	6-15	Spc 400 OR	3
General Education/Electives	15-18	Internship OR	6-15
		General Education/Electives	15-18
	15-18		15-18

* If required, Eng. 090, Math. 090, and/or Ed. El. 090 should be taken the first semester. Three, six, or nine semester hours of courses would be deferred to other semesters. The semester hours earned from these courses do not count towards the 128 semester hours needed for graduation.

Suggested Sequence of Courses: Broadcasting

First Semester*	S.H.
Eng 112	3
HPE 100	2
HPE 101	1
Spc 201	3
Spc 101	3
General Education/Electives	3-6
	15-18

Second Semester	S.H.
Journ 100	3
HPE 102	1
General Education/Electives	11-14
	15-18

Third Semester	
Spc 203 — V/A	3
HPE 203	1
Spc 302	3
General Education/Electives	8-11
	15-18

Fourth Semester	
Spc 301	3
Journ 210**	3
General Education/Electives	9-12
	15-18

**Recommended elective.

Fifth Semester	
Ed 421	3
Speech Elective/General Education Electives	9-15
Eng 313	3
	15-18

Sixth Semester	
Spc 400***	3
General Education/Electives	12-15
	15-18

***If doing internship in Fall.

Seventh Semester	
Internship OR	6-15
Electives	15-18
	15-18

Eight Semester	
Spc 400	3
Internship OR	6-15
Electives	9-12
	15-18

* If required, Eng. 090, Math. 090, and/or Ed. El. 090 should be taken the first semester. Three, six, or nine semester hours of courses would be deferred to other semesters. The semester hours earned from these courses do not count towards the 128 semester hours needed for graduation.

Suggested Sequence of Courses: Public Relations

First Semester*	S.H.
Eng 112	3
HPE 100	2
HPE 101	1
Spc 101	3
General Education/Electives	3-6
	15-18

Second Semester II	S.H.
Journ 100	3
Spc 201	3
HPE 102	1
General Education/Electives	5-8
Spc 210	3
	15-18

Third Semester	
Spc 204	3
HPE 203	1
General Education/Electives	11-14
	15-18

Fourth Semester	
Journ 210	3
Ed 420	3
General Education/Electives	9-12
	15-18

Fifth Semester	S.H.
Spc 310	3
Eng 313	3
General Education/Electives	12-15
	12-15

Sixth Semester	S.H.
Spc 310	3
Spc 401	3
Spc 400**	3
General Education/Electives	3-6
	15-18

**Must take now if doing Internship in Fall.

Seventh Semester	
Internship OR	6-15
General Education/Electives	15-18
	15-18

Eighth Semester	
Internship OR	6-15
Spc 400	3
Spc 401	3
General Education/Electives	9-12
	15-18

* If required, Eng. 090, Math. 090, and/or Ed. El. 090 should be taken the first semester. Three, six, or nine semester hours of courses would be deferred to other semesters. The semester hours earned from these courses do not count towards the 128 semester hours needed for graduation.

Suggested Sequence of Courses: Speech B.S.E.

First Semester*	S.H.
Ed 111	1
Eng 112	3
Lang 101 OR Lang 201	3
Spc 101	3
HPE 100	2
HPE 101	1
General Education/Electives	2-5
	15-18

Second Semester	S.H.
HPE 102	1
Thtr 110	3
Lang 102 OR Lang 202	3
Eng 200	3
General Education/Electives	5-8
	15-18

Third Semester	
HPE 102	1
Spc 207 OR Spc 305	3
Lang 201**	3
Ed 211	1
Eng 201	3
General Education/Electives	4-7
	15-18

Fourth Semester	
Spc 200	3
Eng 202	3
Lang 202**	3
Psy 230	3
Ed 301	2
Gneral Education/Elective	3
	17

Fifth Semester	
Eng 203	3
Spc 207 OR Spc 305	3
Ed 311	1
Eng 225	3
Eng 300	3
General Education/Electives	3
	16

Sixth Semester	
Thtr 417	3
Spc 400	3
Ed 300	3
Eng 226	3
Eng 313	3
Ed 411	1
	16

Seventh Semester	S.H.	Eighth Semester	S.H.
HPE 203	1	Ed 400 OR	12
Ed 400 OR	12	Ed 401	3
Ed 401	3		
General Education/Electives	2-5		
	15-18		15

Professional Level English Course taken either semester senior year.

* If required, Eng. 090, Math. 090, and/or Ed. El. 090 should be taken the first semester. Three, six, or nine semester hours of courses would be deferred to other semesters. The semester hours earned from these courses do not count towards the 128 semester hours needed for graduation.

** If necessary.

Suggested Sequence of Courses: Theatre

First Semester*	S.H.	Second Semester	S.H.
Spc 101	3	Thtr 211	1
HPE 100	2	HPE 102	1
HPE 101	1	General Education/Electives	13-16
Thtr 212	3		
Eng 112	3		
General Education/Electives	3-6		
	15-18		15-18
Third Semester		**Fourth Semester**	
Thtr 210	3	HPE 203	1
Thtr 214	1	Thtr 211	1
Spc 203	3	Thtr 216	3
Thtr 215	3	General Education/Electives	10-13
General Education/Electives	5-8		
	15-18		15-18
Fifth Semester		**Sixth Semester**	
Thtr 211	1	Thtr 417	3
Eng 313	3	Thtr 310	3
General Education/Electives	11-14	General Education/Electives	9-12
	15-18		15-18
Seventh Semester		**Eighth Semester**	
General Education/Electives	15-18	General Education/Electives	15-18

* If required, Eng. 090, Math. 090, and/or Ed. El. 090 should be taken the first semester. Three, six, or nine semester hours of courses would be deferred to other semesters. The semester hours earned from these courses do not count towards the 128 semester hours needed for graduation.

Course Descriptions

ACCOUNTING (ACC)

110 PRINCIPLES OF ACCOUNTING I (3) An introductory course in accounting that will develop a basic understanding of debits and credits, accounts receivable, accounts payable, current assets, liabilities, and capital accounts, balance sheets and profit and loss statements.

111 PRINCIPLES OF ACCOUNTING II (3) Continuation of ACC 110. Topics covered include receivables and payables, inventories, plant and equipment, natural resources, and intangibles, depreciation, depletion, and amortization, partnerships, corporations, dividends, bonds, corporate securities, accounting principles and concepts. Prerequisite: ACC 110

215 MANAGERIAL ACCOUNTING (3) Management uses of information, reporting and analysis, control, cost accounting, variances, planning and budgeting. Prerequisite: ACC 111

290 INTRODUCTION TO FEDERAL TAX ACCOUNTING (3) An introduction to the structure of basic personal income tax law. Emphasis will be placed in the practical application of the law to the individual taxpayer. Topics to be covered include: gross income, basis of assets, business and form returns and tax credits. The student will also be introduced to federal excise and employment taxation. Prerequisite: ACC 110

ANTHROPOLOGY (ANTH)

101 CULTURAL ANTHROPOLOGY (3) Introduction to culture as a conceptional model and to the variations in behavior systems found among human societies. Cultural institutions are examined including the processes associated with their development and change.

102 HUMAN ORIGINS AND EVOLUTION (3) Study of the development of man with attention to human variation. Techniques involved in the discovery, reconstruction, and the classification of man are treated. Provides an introduction to physical Anthropology including prehistoric archaeology.

301 WORLD CULTURES (3) Comparative study of the major cultural areas of the world. Institutional patterns characterizing the cultural complexes of Europe and Southwest Asia, South Asia, Southeast Asia, North and South America and Africa south of the Sahara will be examined.

304 STUDIES IN MAJOR CULTURAL SYSTEMS (3) Systematic examination of the cultural system of a major society. Dominant institutional norms, values, and modes of social organization are treated as parts of an integrated system. Course may be repeated for different cultural systems. Currently offering Studies in Middle East Culture. Prerequisite: ANTH 101.

430 FOREIGN AREA FIELD STUDY (2-8) Supervised field observation of selected aspects of human group activities in one cultural area. Study may be a broad survey of kinship, education, religion, work and governmental patterns or an intensive study of a single institution. Currently offering Field Study of Puerto Rico. Prerequisite: ANTH 101 or SOC 111 and/or permission of instructor.

ART (ART H, ART, ART E)

ART HISTORY (ART H)

101 INTRODUCTION TO ART (3) A study of works of art from the Old Stone Age to the present day, with emphasis on major movements and major artists.

102 SURVEY OF ART (3) An intercultural and interdisciplinary approach to the dominant movements and ideas as they evolved in the visual arts from the first evidence of western man's origin to the twentieth-century.

220 PRIMITIVE ART (3) The study of prehistoric and primitive art from the Paleolithic Period: Africa, Mexico, Europe, the Americas, Asia, Australia and the South Seas. Prerequisite: ArtH 101 or 102.

221 ANCIENT AND MEDIEVAL ART (3) A comprehensive study of architecture, sculpture, painting and minor arts from the prehistoric through the Gothic period; emphasis on aesthetic values and historical implications, iconographic and symbolic significances. Prerequisite: ArtH 101 or 102.

222 ART OF THE RENAISSANCE (3) A study of paintings, sculpture, and architecture in Europe from 14th century to the 17th century, with emphasis on work by Italian, Flemish, and German artists. Prerequisite: ArtH 101 or 102.

225 HISTORY OF MODERN ART (3) A study of the development of Modern Art from late 18th century/early 19th century Neo-Classicism and Romanticism through contemporary trends. Prerequisite: ArtH 101 or 102.

226 ORIENTAL ART (3) A study of art in India, China, and Japan, in the areas of painting, sculpture, architecture, pottery and the minor arts. Prerequisite: ArtH 101 or 102.

227 HISTORY OF PRINTS (3) The study of the history of printmaking and the significant influences of the Eastern and Western cultures on the graphic processes. Prerequisite: ArtH 101 or 102.

228 HISTORY OF ARCHITECTURE (3) A survey of architecture, primarily Western European and American from the New Stone Age to the present day. Prerequisite: ArtH 101 or 102.

229 HISTORY OF BLACK AND AMERICAN INDIAN ART (3) A survey of the Art of Black Africa and its influence on Afro-American Art and the beginnings of Modern Art in Europe. The course also covers tribal art of selected North American Indian groups.

230 HISTORY OF AMERICAN ART (3) A study of American Art and architecture from the Colonial period to the present day. Prerequisite: ArtH 101 or 102.

ART (ART)

201 PAINTING (3) Introduction to the methods, techniques and approaches of the painter. An emphasis is placed on composition, application and involvement in creative self-expression. Stress is placed upon the understanding and use of the media for solving various problems of representation. 1 Lect., 5 Lab.

210 DRAWING I (3) An introduction to fundamental concepts of graphic expression with studio experiences in a variety of media, rendering techniques and subject matter. 1 Lect., 5 Lab.

231 PRINTMAKING I (3) An introduction to the print-making processes of linocut, woodcut, lithography, serigraphy, etching, intaglio and drypoint with emphasis on their use for creative expression. 1 Lect., 5 Lab.

241 COLOR AND DESIGN (3) An introductory course to design. Emphasis is placed on the creative use of color and basic elements of design emphasizing their function

and relationships through discussion and assigned problems. Introduction to types of harmony, sequence and balance while applying methods of design and representation through the use of various media. 1 Lect., 5 Lab.

251 **JEWELRY I** (3) A study of two and three dimensional design concepts, with emphasis on individual solutions in the medium of metal. Both precious and common materials will be used. Traditional techniques of jewelry making will be explored. 1 Lect., 5 Lab.

261 **WATERBASE MEDIA I** (3) An investigation into the waterbase media: transparent watercolor, tempera, and acrylic polymer. 1 Lect., 5 Lab.

271 **CERAMICS I** (3) Study of hand and wheel methods of forming. Introduction to the principles of glaze formulation; kiln stacking and firing. 1 Lect., 5 Lab.

281 **SCULPTURE I** (3) An exploration of three dimensional design as related to sculpture. Basic techniques of stone and wood carving will be explored in addition to various methods of material build ups (wood, plaster, plexiglas, metal, etc.). 1 Lect., 5 Lab.

295 **CRAFTS** (3) A study of functional and non-functional three dimensional crafts. Students will investigate and develop creative forms using a variety of craft media. 1 Lect., 5 Lab.

298 **PUPPETRY I** (3) To learn techniques and procedures of some of the different forms of puppetry, and some of the applications possible. 1 Lect., 5 Lab.

300 **VISUAL STUDIES IN AESTHETIC EXPERIENCES** (3) Philosophic theories of art aesthetic experience, principles and criticism in the nature and comprehension of the character of art; the artist and relationship to life. This will be emphasized by analytical and critical writing pertinent to the subject. To be taken during the junior and senior year.

302 **ADVANCED PAINTING** (1-6) A course for the student who wishes to advance and mature those skills and powers of expression developed in the first level studio course, with emphasis on the development of personal techniques and styles and/or exploration into traditional and experimental media. The student may elect the number of semester hours for which he wishes to work, with specific requirements developed in coordination with the instructor. The course may be repeated any number of times, not exceeding a total of six (6) semester hours. Prerequisite: Art 201.

311 **ADVANCED DRAWING** (1-6) An opportunity for the student who wishes to further develop his/her drawing skills. The direction of the course of study is determined by the student and instructor. The course may be taken for any number of semester hours not exceeding the total of six (6). Prerequisite: Art 210.

332 **ADVANCED PRINTMAKING** (1-6) Advanced problems in the various printmaking processes; linocut, woodcut, lithography, serigraphy, etching, intaglio and drypoint. The student may select the number of semester hours for which he wishes to work with specific requirements developed in coordination with the instructor. The course may be repeated any number of times, not exceeding a total of six (6) semester hours. Prerequisite: Art 231.

342 **ADVERTISING, DESIGN AND LETTERING** (3) An introduction to the many aspects of graphic design as it relates to the commercial world. Studio experiences involve logo design, ad layout, hand lettering techniques and basic package design. 1 Lect., 5 Lab.

345 **FIBERS** (3) The creative application of the principles and elements of design and color theory as applied to fibers and fabrics. This includes creative designing of wall hangings, creative weaving, Batik dying and stitchery. 1 Lect., 4 Lab.

346 **FIBERS WORKSHOP** (3) Course is designed to familiarize the participants with constructed textile techniques such as weaving, macrame, knitting, crochet, and rug making. All are explored through both functional and expressive aspects of textiles. 6 Lab.

352 **ADVANCED JEWELRY** (1-6) An advanced study of traditional metal techniques with emphasis on metal smithing, and gem setting. A continued study of lost wax processes, exploring various mold materials and methods of casting. The student may elect the number of semester hours for which he wishes to work, with specific requirements developed in coordination with the instructor. The course may be repeated any number of times, not exceeding a total of six (6) semester hours. Prerequisite: Art 251.

362 **ADVANCED WATERBASE MEDIA** (1-6) An opportunity for a student to pursue wider directions in water color and acrylic painting. The course is flexible enough in structure to provide students with opportunities to seek in-depth solutions to personal goals. Students may opt for any number of semester hours not exceeding the total of six (6). The course may be taken several times. Prerequisite: Art 261.

372 **ADVANCED CERAMICS** (1-6) Advanced studies and individual projects in techniques studied in Art 271, with emphasis on developing a personal style. Intensive work in throwing on the wheel, hand building, development of stoneware bodies. Glaze calculation and practical modification. Kiln stacking and firing. This course may be repeated any number of times, but not exceeding the total of six (6) semester hours. Prerequisite: Art 271.

382 **ADVANCED SCULPTURE** (1-6) A continuation of Sculpture I with emphasis on personal growth and development in specific sculptural media, or experimental media. The student may elect the number of semester hours for which he wishes to work, with specific requirements developed in coordination with the instructor. The course may be repeated any number of times, not exceeding a total of six (6) semester hours. Prerequisite: Art 281.

390 **HAND BOOKBINDING WORKSHOP** (1-3) A variable credit course taught in the workshop structure. Various bookbinding techniques starting with basic skill and progressing to expert level will be explored by the students. Binding styles that will be investigated are: Accordion, Japanese, Side Sewn, Saw-Kerf, and Signature. These books will be useful for keeping records, sketch books, poetry books, diary and personal logs.

396 **ADVANCED CRAFTS** (1-6) Advanced Crafts will investigate various craft techniques and processes. Each student will have opportunities for in-depth experimentation to develop competencies in various media of the student's choice. This course may be repeated any number of times but not exceeding a total of six (6) semester hours. Prerequisite: Art 295.

398 **INTERIOR DESIGN** (2) Interior design in planning, selection and production as applied to the home and its furnishings. This course will deal with the "furnishing" of space for living. This furnishing should meet the human needs for which it was designed. 1 Lect., 3 Lab.

401 **CULTURAL ORIGINS OF THE WEST** (6) A travel-study seminar abroad visiting countries in Western Europe. The course is planned as one of intensive study of the humanities as they originated in the part of the Western World from which our

culture springs. Lectures are conducted throughout the tour by the director; a term paper is prepared by the participants.

403 **ART SEMINAR** (1) The Art Seminar will provide the art student with the opportunity to exchange ideas, to enhance critical dialectic, and to participate in activities relevant to the professional artist. The activities of the course will assist the student in developing his/her portfolio and exhibition skills.

404 **SPECIAL PROBLEMS IN ART** (1-6) This course is offered to those persons interested in extending their scope or gaining depth in specific academic areas related to art and/or education. This course provides an opening or situation whereby a student can fulfill his needs by working with a faculty member who has agreed to advise and direct the student in his efforts. Since this is a mutual agreement between the faculty member and the student, and since the needs and conditions change with each student, the requirements and restrictions are determined by the persons concerned.

445 **ADVANCED FIBERS** (1-6) The course is designed to allow students to develop skills learned in beginning textile courses, either by specializing or learning new techniques. Techniques covered may include weaving (tapestry, pattern, primitive loom), hooking, knotting, crochet, knitting, stitchery, macrame, batik, tie dye, block printing, silk screen, dye painting, ikat, combination techniques. This course may be repeated any number of times but not exceeding the total of six (6) semester hours. Prerequisite: Art 345.

497 **INDEPENDENT STUDY** (1-3) (See page 32 for course description.)

498 **ADVANCED PUPPETRY** (1-6) Course for the development of skills, procedures and techniques begun in Puppetry I. The student is encouraged to specialize for an in-depth study of construction and/or application. This course may be repeated any number of times, but not exceeding the total of six (6) credits. Prerequisite: Art 298, or similar background, or permission of instructor.

ART EDUCATION (ART E)

288 **HISTORY AND PHILOSOPHY OF EDUCATION AND ART EDUCATION** (3) The purpose of this course is to acquaint the student with social, historical and philosophical developments in education and art education.

290 **ART EDUCATION IN ELEMENTARY TEACHING** (3) A pre-student teaching experience in which each student prepares lessons and teaches children in the preschool age through the fifth and sixth grades. The course not only involves the science of teaching but also the organization of a program in Elementary Art. Other activities include field trips, observations and participation in nearby public schools. The program takes place on Saturday morning. 2 Lect., 4 Lab.

292 **ART IN THE SECONDARY SCHOOL** (3) A practical introduction to Secondary School methods. Emphasis for the course evolves from practical daily classroom participation. It is through this practical experience that the college student is introduced to classroom procedures, class and lesson organization, school organization, problems in developing learning units, co-curricular activities, team teaching, structured and unstructured approaches, introduction to use and care of supplies and materials and those problems concerning the art teacher in the total school situation. Prerequisite: ArtE 290. 4 Lect., 6 Lab.

294 **CURRICULUM DEVELOPMENT IN ART EDUCATION** (2) An investigation of the concepts, attitudes, and values of art theory and practice as related to curriculum; a study of classroom problems and procedures in various teaching situations.

343 **ARTS AND CRAFTS IN THE SPECIAL EDUCATION CURRICULUM** (3) Creative work in a variety of activities with arts and crafts materials with particular emphasis on the

needs of special education classes. Required of students concentrating in the area of special education. 1 Lect., 3 Lab.

344 **ARTS AND CRAFTS IN THE SPECIAL EDUCATION CURRICULUM II** (3) A continuation of Art 343. 1 Lect., 3 Lab.

392 **TEACHING ART IN THE ELEMENTARY GRADES** (3) The philosophy and principles of art education in the Elementary curriculum; experience in the development of self-expression through a variety of media and activities as the basis for understanding and evaluating children's work. Required for all Elementary Education majors. 2 Lect., 2 Lab.

444 **ART AND RECREATION FOR THE HANDICAPPED CHILD** (6) A three week workshop practicum which combines classroom instruction with direct application, working with handicapped children in camping situations, sponsored by Easter Seal Society of Pennsylvania. Students will work in classroom on campus for one week, then spend two weeks, 24 hours a day, in camp living, working, and playing directly with handicapped children.

ASTRONOMY (ASTR)

105 **THE EXPLORATION OF THE SOLAR SYSTEM** (3) A descriptive astronomy course concerning contemporary astronomical and astrophysical theories about the solar system. 2 Lect., 2 Lab.

106 **ONE POSSIBLE UNIVERSE** (3) A descriptive astronomy course concerning contemporary astronomical and astrophysical theories about the universe. 2 Lect., 2 Lab.

108 **OBSERVING THE AUTUMN SKY** (1) This study module concentrates upon the constellations, stars and other celestial objects to be found in the evening sky during autumn. Students also learn pertinent historical, legendary and astronomical facts about them. The weekly meetings make extensive use of the autumn sky as seen in G.B. Strait Planetarium. Students are encouraged to study the actual evening skies; if weather permits, classes will be held outdoors in order to make observations, both with the unaided eye and through telescopes.

109 **OBSERVING THE WINTER SKY** (1) This module concentrates upon the evening sky of winter. See Astro 108 for course description.

110 **OBSERVING THE SPRING SKY** (1) This module concentrates upon the evening sky of spring. See Astro 108 for course description.

111 **OBSERVING THE SUMMER SKY** (1) This module concentrates upon the evening sky of summer. See Astro 108 for course description.

112 **AEROSPACE** (3) Relevance of space exploration to society will be integrated into course content. The laboratory will acquaint the student with propulsion systems; problems of guidance, navigation, radiation, and aerodynamics; and the physiological and psychological reactions to space travel. 2 Lect., 2 Lab.

113 **ORIGINS OF LIFE** (1) The various mythological and scientifically-based theories about the origin of life are presented for critical study. Then, the students consider what is being done, in both the laboratory and the field, to determine how life began. Finally, the various experimental programs, currently underway, to attempt the generation of life, are discussed.

405 **PLANETARIUM OPERATIONS** (1) Although each student will be required to learn how to operate Planetarium instruments, the primary aim of this course is to acquaint the participants with both the extent and limitations of the facility as an

educational tool for school children as well as for the general public. Prerequisites: Undergraduates — 6 semester hours of astronomy or 3 semester hours and permission of instructor; Graduates — permission of instructor.

497 INDEPENDENT STUDY (1-3) (See page 32 for course description.)

BIOLOGY (BIO)

101 MAN AND THE BIOLOGICAL WORLD (4) An introduction to biological processes; study and discussion of these processes together with ecological aspects of life. The laboratory stresses demonstration and analysis of biological processes. 3 Lect., 2 Lab.

102 CONTEMPORARY BIOLOGICAL PROBLEMS (3) There is no fixed syllabus. Topics are current and usually changed for each semester. Guest lecturers will be given time to present their specialities. Prerequisite: BIO 101

111 INTRODUCTION TO CELL BIOLOGY (4) A study of the cellular level of life with emphasis on cellular structures and their relationship to movement, function and energy transformation. Cellular genetics and the cellular approach to medicine are also discussed. Designed for Biology majors. 3 Lect., 3 Lab.

210 ZOOLOGY (4) An evolutionary approach to the study of the animal kingdom, with attention given to the development of organ systems throughout the several phyla of invertebrates and vertebrates. Function, correlated with structure and taxonomic features, is emphasized. Additional evidence for evolution is included through an introduction to Genetics, Embryology and Ecology. Prerequisite: BIO 101 or 111. 3 Lect., 3 Lab.

220 BOTANY (4) Study of plant structures and function, development, growth, diversity and evolution. Prerequisite: BIO 101 or 111. 3 Lect., 2 Lab.

230 FIELD ZOOLOGY (3) Taxonomy of local fauna; field collections and laboratory studies. Prerequisites: BIO 101, 111 or 210. 2 Lect., 3 Lab.

240 LOCAL FLORA (3) Taxonomic study of local flowering and non-flowering plants. Prerequisites: BIO 111 or 220. 1 Lect., 4 Lab.

250 MARINE BIOLOGY (3) This course includes studies basic to the biology and ecology of marine organisms. Practical applications such as biological-ecological sampling techniques and species identification are covered in the laboratory and on a coastal field trip. Prerequisites: BIO 111 or permission of the instructor. BIO 310 recommended. 2 Lect., 2 Lab.

260 FIELD METHODS IN ENVIRONMENTAL BIOLOGY (3) A study of the field methods employed in measuring the biological qualities of the environment. Techniques applicable to surveys of the major aquatic and terrestrial habitats are taught through field experience. Analysis of data obtained and consideration of its significance is an integral part of the course. Weekly schedule: 2 hours recitation and 12 hours lab. Prerequisites: BIO 101 or equivalent. BIO 310 recommended.

309 PSN/BIO EPIDEMIOLOGY (3) The study of distribution and determinants of disease and injury in populations. This provides an introduction into community health and medical problems and services. Problem solving, Case-control studies, and statistical analysis are emphasized. Prerequisite: PSN Program or permission of instructor. 2 Lect., 1 Recit.

310 ECOLOGY (3) A study of the fundamental ecological principles manifested in the mutual relationships of plants and animals in their environment. Prerequisite: BIO 111 or permission of instructor. 2 Lect., 2 Lab.

320 **ORNITHOLOGY** (3) The biology of birds with emphasis on structure, behavior and taxonomy. Field trips for the study of local birds. Prerequisite: BIO 210 or permission of instructor. 2 Lect., 3 Lab.

325 **ENTOMOLOGY** (3) Survey of the classification, structure, physiology, biology and economic importance of insects. An introduction to the study of insects as a major segment of the biological community. Laboratory exercises on the anatomy and practice in the techniques of insect identification. Prerequisite: BIO 210 or permission of instructor. 2 Lect., 2 Lab.

330 **PLANT PHYSIOLOGY** (3) A course designed to develop an understanding of the chemical and physical processes occurring in plants including respiration, photosynthesis, hormonal activity, osmosis, transpiration, mineral absorption and translocation. The laboratory work will involve analysis of these functions. Prerequisites: BIO 111 and 220, or permission of instructor. 2 Lect., 2 Lab.

331 **VERTEBRATE ANATOMY** (3) A history of vertebrates and comparative systems through the major vertebrate groups correlating their historical development. Prerequisite: BIO 101 or 111. 2 Lect., 4 Lab.

332 **PHYSIOLOGY** (4) A systematic study of the life processes and functions of the animal body with particular emphasis on the mammalian vertebrate. Prerequisite: BIO 101 or 111. 3 Lect., 2 Lab.

340 **GENETICS** (3) An introductory course with emphasis on basic principles and concepts of genetics concerning chromosomes, DNA, RNA, linkage, etc. An initial discussion will cover classical genetics followed by an in-depth study of biochemical genetics. The laboratory section of this course will be used to demonstrate the aforementioned principles and concepts as well as acquaint the student with some of the organisms used in genetic research. Prerequisite: BIO 111 or permission of the instructor. 2 Lect., 3 Lab.

345 **EMBRYOLOGY** (3) Study of the origins and development of animals with special emphasis on the frog, chick and mammal. Laboratory study of embryological slides. Prerequisite: BIO 111 or permission of instructor. 2 Lect., 3 Lab.

351 **ANIMAL HISTOLOGY AND BASIC MICROTECHNIQUES** (3) A systematic study of the microanatomy of the vertebrate body starting with cells and tissues and working through the complete organ systems. Prerequisite: BIO 101 or 111. 2 Lect., 2 Lab.

355 **MICROBIOLOGY** (3) An introductory course with an emphasis on the basic principles and concepts of microbiology concerning anatomy, classification, physiology and practical uses of micro-organisms. The laboratory section of this course will be used to demonstrate the aforementioned principles and concepts as well as help the student develop aseptic technique. Prerequisite: BIO 111 or permission of instructor. 2 Lect., 3 Lab.

360 **ICHTHYOLOGY** (3) A field and laboratory study of the fish inhabiting the streams and rivers of this area constitutes the major portion of this course. Collection, measurement and chemical data as related to fish populations, management and meristic characters will be collected and analyzed. Prerequisite: BIO 210, 310, 331 or permission of instructor. 2 Lect., 3 Lab.

362 **LIMNOLOGY** (3) This course deals with basic concepts in the study of inland waters. Focus on biological, chemical, physical, and geological factors which determine biological productivity in natural waters. Prerequisite: BIO 111 or permission of instructor. 2 Lect., 3 Lab.

375 PLANT MORPHOLOGY (3) Comparative study of vegetation and reproductive structures of the principal plant groups with an aim of understanding their possible relationships. Prerequisite: BIO 111 or 220 or permission of instructor. 2 Lect., 2 Lab.

380 IMMUNOLOGY (3) The study of antigens and antibodies encompassing the folds of the immune response, autoimmunity, allergic reactions, tumor immunology, tissue graft and transplant biology.

404 BIOLOGY SEMINAR (1) Study and research projects involving investigation of recent literature in the field of biology; preparation of seminar papers on assigned problems. Senior Biology majors only. 1 Recit.

444 MOLECULAR BIOLOGY (3) An examination of the principles and techniques underlying the chemical and physical aspects of living systems. A study of the structure and activities of biological molecules which, properly integrated, constitute all forms of life. The laboratories will demonstrate techniques of the activities, separation and analysis of these molecular forms. Prerequisite: BIO 111. 2 Lect., 2 Lab.

450 BIOLOGY INTERNSHIPS (1-12) The biology internship gives students the opportunity to apply knowledge and skills in the biological sciences while working with a public or private agency involved in aspects of applied biology. The practical experience thus acquired both supplements and reinforces the more academic aspects of biology stressed in the classroom.

497 INDEPENDENT STUDY (See page 32 for course description.)

BUSINESS ADMINISTRATION

100 MANAGEMENT & ORGANIZATION (3) Designed to acquaint the student of the functions and internal structure of modern business organizations as well as various techniques and systems employed by management in pursuit of desired organizational objectives.

130 INTRODUCTION TO BUSINESS AND MANAGEMENT (3) The student will be introduced to the history, structure and functional aspect of Business. In addition to a brief examination of the underlying economics of American business the student will develop a familiarity of the functions of management and some of the thought behind modern American industry.

150 WOMEN IN MANAGEMENT (3) This course examines management structure and practice in relation to women; their goals, their expectations, their attitudes and their skills. The difficulties women encounter in being successful in management will be analyzed and strategies which both men and women can use in changing the situation will be discussed. The course will emphasize case studies.

160 SMALL BUSINESS MANAGEMENT (3) The course emphasizes those aspects of management that are uniquely important to small firms. It examines an expanded treatment of business strategy and the process of strategic planning for small firms. This course further reflects the current pressures of environmentalism, consumerism, and other issues of social responsibility. As such it provides additional opportunities for student analysis of current problems and experience in decision-making.

330 MARKETING (3) The course fills an integral part in the development of the skills necessary for the preparation of the student whose career interest is a business environment. The student of business should be aware of marketing, one of the four major functions of business (in addition to management, production and finance). Prerequisite: BUS 130.

340 **FINANCE** (3) Corporate finance stressing the management approach as it applies to asset management and capital structure. Emphasis is placed on financial policies regarding the acquisition of funds and their allocation to competing assets within the firm. Prerequisites: ACC 215, ECON 101, MA 105 and MA 111.

345 (PSCI 345) **GOVERNMENT AND BUSINESS IN SOCIETY** (3) This course presents an overview of the more critical interactions between business and society. It provides a close examination of the idea of "social responsibility." The need of the businessman to be aware of and respond to the social environment is emphasized. Prerequisites: ECON 102, and Business major, junior standing.

350 **PRODUCTION MANAGEMENT** (3) Study of production functions including production planning, scheduling, inventory control, quality control, work measurement, methods analysis and facilities planning. Prerequisites: ACC 215 and MA 111.

410 **BUSINESS AND LAW ETHICS** (3) The law of contracts, sales, negotiable instruments, bank deposits and collections, secured transactions, and business organizations. Social and ethical considerations will be emphasized, including a critical examination of the values which appear to underlie our managerial society, and the process by which such values are formed and modified. Prerequisites: ACC 111 and BUS 330.

490 **BUSINESS POLICY** (3) A study of business problems and the formulation of policies to meet these problems from the viewpoint of general management integrating knowledge acquired in other courses in order to develop skill in policy formulation for particular functions and for companies as a whole. Long range goals' attainment and the required administrative action will be emphasized. The course is supplemented by case studies, simulation games, and interactions with management of local business and industry. Prerequisite: Business major, senior standing.

497 **INDEPENDENT STUDY** (1-3) Independent study is an activity initiated by the student to increase his/her ability and already advanced knowledge in a particular academic discipline. The subject is examined in an intensive manner with guidance by a faculty member who has special expertise in that subject. Prerequisite: Permission of instructor.

CHEMISTRY (CHEM)

101 **INTRODUCTORY CHEMISTRY** (4) A treatment of fundamental principles for non-science majors such as Home Economics students. Does not meet the requirements for the degree programs in Chemistry and Biology. 3 Lect., 1 Recit., 2 Lab.

102 **ORGANIC AND BIOCHEMISTRY** (4) Principles of organic and biochemistry which are important and useful to non-science majors. Does not meet the requirements for the degree programs in Chemistry and Biology. 3 Lect., 1 Recit., 2 Lab. Prerequisite: Chem. 101.

103 **ENVIRONMENTAL CHEMISTRY** (3) A non-laboratory course for non-science majors which deals with the chemical aspects of pollution, resource depletion, energy sources, drugs, chemical additives, etc.

106 **CHEMISTRY FOR THE ALLIED HEALTH SCIENCES** (3) A one semester survey course for non-science majors. General, Organic, Biochemistry and Clinical chemistry are emphasized for students in health support programs. The course is usually taught at the Robert Packer Hospital.

111 **GENERAL CHEMISTRY I** (4) Designed for science and engineering majors, this course is a study of the fundamental principles of chemistry from the standpoint of stoichiometry, gases, states of matter, solutions and equilibrium theory. Laboratory sessions stress chemical principles discussed in the lecture. Laboratory sessions include one hour of lecture on theory and techniques in chemical principles. 3 Lect., 3 Lab.

112 **GENERAL CHEMISTRY II** (4) A continuation of Chem. 111, kinetics, thermodynamics, oxidation-reduction, atomic and molecular structure, bonding and periodic relationships are studied. The laboratory work is an introduction to inorganic qualitative analysis and includes experiments designed to exemplify chemical principles. Laboratory sessions include one hour of lecture on theory and techniques in chemical principles. Prerequisite: Chem. 111. 3 Lect., 3 Lab.

201 **INTRODUCTION TO BIOCHEMISTRY** (4) A one semester course in elementary biochemistry for non-science majors having a minimum of preparation in organic chemistry. Prerequisite: Chem. 102. 3 Lect., 2 Lab.

211 **ORGANIC CHEMISTRY I** (4) Fundamentals of organic chemistry are presented. Modern theory, reaction mechanisms and stereochemistry are included along with nomenclature, preparations, reactions and properties of organic compounds. The laboratory stresses synthesis, chemical and physical properties and an introduction to instrumental technique. The laboratory period includes one hour of lecture on theory and techniques of laboratory operations. Prerequisite: Chem 112. 3 Lect., 4 Lab.

212 **ORGANIC CHEMISTRY II** (4) A continuation of Chem. 211. The laboratory period includes one hour of lecture on theory and techniques of laboratory operations. Prerequisite: Chem 211. 3 Lect., 4 Lab.

311 **QUANTITATIVE ANALYSIS** (4) An introductory course in analytical chemistry emphasizing classical titrimetric and gravimetric methods and related theories. Prerequisite: Chem. 112. 3 Lect., 4 Lab.

321 **PHYSICAL CHEMISTRY I** (4) A study of the fundamental principles of thermodynamics of gases and non-electrolytes. Topics include kinetic theory, gases, thermodynamic and non-electrolyte solutions. Prerequisites: Chem. 112 and 311, MA 240, Physics 188 and 211. 3 Lect., 4 Lab.

322 **PHYSICAL CHEMISTRY II** (4) A continuation of Chem. 321. Topics include: thermodynamics of electrolytes, atomic and molecular structure and chemical kinetics. Prerequisite: Chem 321. 3 Lect., 4 Lab.

332 **INSTRUMENTAL ANALYSIS** (3) Principles and applications of instrumental methods in chemical and structural analysis. Studies include electroanalytical, spectrophotometric and chromatographic techniques. Prerequisite: Chem. 311. 2 Lect., 3 Lab.

341 **BIOCHEMISTRY** (4) A study of carbohydrates, lipids, proteins, enzymes, nucleic acids, vitamins and hormones in terms of structure, function and synthesis in living systems. The laboratory includes the isolation, identification and chemical behavior of biochemically important molecules. Prerequisite: Chem. 212 or consent of instructor. 3 Lect., 3 Lab.

342 **PHYSICAL CHEMISTRY FOR THE LIFE SCIENCES** (4) A one semester course in physical chemistry emphasizing subjects bearing on the life sciences. Topics include buffers, bioenergetics, kinetics of enzyme reactions, colloidal and large particle systems, membrane phenomena, nuclear chemistry and elementary treatments of traditional subjects in physical chemistry. Prerequisites: Chem. 212, Physics 211. 3 Lect., 2 Lab.

352 **RADIOCHEMISTRY** (3) Study of radioisotope methodology. A laboratory oriented course familiarizing the student with radiation detection and applications in natural science problems. The course is of practical value to the B.S. and B.A. science major. Prerequisite: junior or senior Science majors or permission of the instructor. 2 Lect., 3 Lab.

410 **CHEMISTRY SEMINAR** (1) Reports emphasizing chemical literature searches and/or current research. Prerequisite: Upper division Chemistry majors.

420 **QUALITATIVE ORGANIC CHEMISTRY** (3) The identification of organic compounds by various classical and instrumental techniques. Prerequisite: Chem. 212. 2 Lect., 4 Lab.

421 **ADVANCED ORGANIC CHEMISTRY** (3) An advanced lecture course designed to deepen and expand knowledge in the field. Topics such as reactions, mechanisms, reactive intermediates, photochemistry, kinetics, stereochemistry, natural products and spectroscopy may be stressed. Prerequisite: Chem. 212.

431 **ADVANCED INORGANIC CHEMISTRY** (4) A presentation of atomic structure and periodic properties. In addition to other topics, valence bond, molecular orbital, crystal field and ligand field theories are treated in detail. Laboratory sessions include one hour of lecture on theory and techniques in the preparation of representative compounds. 3 Lect., 4 Lab.

432 **STRUCTURAL CHEMISTRY** (3) Modern methods of structure determination of inorganic and organic compounds. X-ray diffraction, ultraviolet and infrared absorption spectra, mass spectrometry, and nuclear magnetic resonance spectroscopy are discussed in detail. Prerequisite: Chem. 332.

490 **PROBLEMS IN CHEMISTRY** (1-3) Study projects under the direct supervision of an instructor. Library and laboratory research in selected problems. Prerequisite: Consent of instructor.

497 **INDEPENDENT STUDY** (See page 32 for course description.)

COMPUTER AND INFORMATION SCIENCES (CIS)

101 **COMPUTERS IN SOCIETY** (3) An introduction to computing, designed to acquaint the student with the broad impact of computers on modern society, and to provide a basic understanding of how to program and use them. Particular attention will be paid to the extension of concepts and capabilities made possible by the advent of computers. Through the use of the computer in a variety of applications drawn from the social sciences and humanities, as well as from the natural sciences, it is stressed that the computer is not primarily a numerical calculator but a general symbol processor.

104 **INTRODUCTION TO COMPUTER SCIENCE** (3) Algorithms, programs, and computers. Basic programming and program structure. Programming and computing systems. Debugging and verification of programs. Data representation. Organization and characteristics of computers. Survey of computers, languages, systems, and applications. Computer solution of several numerical and non-numerical problems using one or more programming languages.

105 **BUSINESS PROGRAMMING AND INFORMATION PROCESSING** (3) Topics to be covered will be definition of the problem, problem analysis, programming analysis to include flowcharting and decision tables, program preparation, optimization using the Common Business Oriented Language (COBOL), program operation and maintenance, and documentation. Examples of problems and programming

solutions will be used throughout the course. The student will be expected to write and execute his own programs on the computer. Prerequisite: CIS 104 recommended.

205 INTRODUCTION TO FILE PROCESSING (3) Design of data bases and their retrieval and maintenance systems. Job control language methodology. Use of available program packages and special purpose languages. The application of computers in the areas of management will be stressed; considerable programming projects. Prerequisites: CIS 104; CIS 105 or MA 107.

225 AUTOMATED ACCOUNTING SYSTEMS (3) A general introduction to the development and implementation of an electronic data processing accounting information system. Approach, elements of design, input media, computer-based accounting, audit trails, relevancy and timeliness of information. Prerequisites: ACC 215 and CIS 105.

230 LANGUAGE AND STRUCTURE OF COMPUTERS (3) Fundamentals of assembly language programming. The logical basis of computer structure, machine representation of information, flow of control, instruction codes, arithmetic and logical operations, indexing and indirect addressing, input-output, symbolic representation of programs and assembly systems, and recent advances in computer organization. Prerequisites: CIS 104; CIS 105 or MA 107.

301 DATA STRUCTURE (3) Representation, classification and management of information. Involves data organization; relationships between data items, fields, records, files and volumes; ordering of data into arrays, trees and graphs; input devices; sequential and random access concepts of data management and algorithmic and string manipulation languages applied to these data structures. Prerequisites: CIS 104; CIS 105 or MA 102; and MA 109.

310 INTRODUCTION TO SYSTEMS ANALYSIS (3) An introduction to the concepts of systems analysis and design. Problem definition; data gathering, information analysis, presentation techniques, implementation planning, system controls, documentation. Selected case studies. Prerequisites: CIS 225 and BUS 130.

325 OPERATING AND PROGRAMMING SYSTEMS (3) Functions of computer components (CPU, reader, punch, tapes, printer, memory), systems, hardware, operation, maintenance, accounting routines. Insight into the function of translators, compilers, monitors, assemblers, processors, generators, data scheduling systems, simulators, sort-merge, control and supervisory systems, libraries and systems support. Prerequisite: CIS 230.

335 ASSEMBLY LANGUAGE PROGRAMMING (3) Machine organization for large-scale general purpose computer. Assembly language programming. Students write specific programs in assembler. Introduction to I/O macros and subroutines w/application in the system area being stressed. Prerequisite: CIS 230.

401 MANAGEMENT INFORMATION SYSTEMS (3) The advanced study of information processing systems which provide both transactional processing for an organization and also information and processing support for management and decision functions. Prerequisites: CIS 301 and CIS 310.

420 SPECIAL PROBLEMS IN COMPUTER APPLICATIONS (3) An individualized honors course designed to allow a student to pursue a specialized topic or project under supervision. Credit is granted according to the scope and nature of the project. Student may be nominated or sponsored by the professor interested in the work. Course may be repeated for different projects. Prerequisite: Permission of instructor.

430 **ORGANIZATION OF PROGRAMMING LANGUAGES** (3) Discussion of models and techniques used in the design and implementation of compilers. Topics include lexical analysis, compilation of arithmetic expressions and simple statements, specification of syntax, algorithm for syntactic analysis code generation, and optimization. Prerequisites: CIS 205; CIS 335; and MA 260 (recommended).

480 (MA 480) **OPERATIONS RESEARCH** (3) The development and use of the techniques research. Topics include linear programming, queuing theory, probabilistic inventory models and simulation. Prerequisites: CIS 105 or MA 107; MA 105; MA 109; and MA 111.

497 **INDEPENDENT STUDY** (1-3) (See page 32 for course description.)

CRIMINAL JUSTICE ADMINISTRATION (CJA)

100 **INTRODUCTION TO THE ADMINISTRATION OF CRIMINAL JUSTICE** (3) An introduction to the field of criminal justice; the historical development of the police, courts and correctional institutions of government; the conceptual and philosophical issues relating to contemporary law enforcement, courts and corrections; the literature, studies, research and authorities in criminal justice; careers in criminal justice.

101 **INTRODUCTION TO CORRECTIONS ADMINISTRATION** (3) Origin and history of incarceration practices and procedures; associated organizational, criminological and penological concepts; categories of inmates and laws affecting classification; special custody problems and treating programs; staff organization — professional administrative and custodial personnel training, recruitment and promotions; interagency relationships and cooperation, release programs, furloughs, work-release and final discharge.

102 **INTRODUCTION TO LAW ENFORCEMENT** (3) An introduction to Law Enforcement problems and practices; its legal, political and historical framework. An analysis of police organizations, and their relationship with other criminal justice and social agencies.

240 **ORGANIZED CRIME IN AMERICA** (3) An investigation into the history and impact of organized crime upon American social, economical and political institutions. Organized crime prevention, including investigation and prosecution; the education of criminal justice professionals and the general public in coping with organized crime is also stressed.

251 **POLICE-COMMUNITY RELATIONS** (3) Basic definitions; rule of law; individual and societal aspects of police-community relations; police and minority groups; social change and law enforcement; principles of programming in police-community relations; police discretion; police role, police problems.

252 **INVESTIGATION AND INTERROGATION** (3) This course focuses upon an introduction to the fundamentals of criminal investigation, rules of evidence, sources of information, observations, descriptions and identifications, including collection, preservation and processing of physical evidence, records, reports, statements, case preparation, surveillance and undercover techniques, modus operandi and raids.

256 **PROBATION, PAROLE AND COMMUNITY CORRECTIONS** (3) Examination of community treatment in the correctional process; contemporary usage of presentence investigation, selection, supervision, release of probationers and parolees.

257 **CORRECTIONAL INSTITUTIONS AND SERVICES** (3) Intensive analysis of extramural programs for juvenile and adult offenders; professional functions in the total correctional process.

260 HISTORY OF CRIMINAL JUSTICE IN THE UNITED STATES (3) The history of law enforcement, the judicial system, and courts in America with attention to the English background and emphasis on Twentieth Century America.

276 CRIME: A MULTIDISCIPLINARY APPROACH (3) This course is designed to expose students to the nature and forms of crime. Major areas of concern are the functions of law, the scientific study of crime, criminological typologies, social definitions of crime, comparative criminology, and the problem of punishment.

295 DELINQUENCY AND THE CRIMINAL JUSTICE SYSTEM (3) This course is designed to expose the student to the full impact of the delinquency problem. Theories of delinquency causation, prevention, and rehabilitation will be critically examined.

301 INDUSTRIAL SECURITY (3) This course presents basic industrial security concepts, principles and methodologies. The student is provided with a knowledge of procedures and programs currently applied in industrial security management.

324 ADMINISTRATION OF JUSTICE (3) An examination of the role and function of the judiciary in the policy-making process. Emphasis is placed on the variables affecting the process of judicial decision-making as well as a study of modes of compliance by the populace to judicial decisions.

326 COURT MANAGEMENT (3) This course deals with the major problem areas of court administration: judges as administrators, budgeting, calendars, caseflow management; jury selection, juror utilization, records management, legal forms, forms design, personnel practices and administration. The course is oriented around problem solving. The students will be expected to work together as a team in the solution of real problems that face rural and metropolitan courts at the present time. Field trips, investigation and guest lectures will supplement the materials presented in class.

336 CRIMINALISTICS (3) This course examines the phase of the criminal investigation process concerned with physical evidence. Major emphasis will be placed upon legal and technical consideration in the recognition, collection, and preservation of various categories of physical evidence and the process through which it is transmitted to the crime laboratory. Attention will also be given to knowledge requirements of the evidence technician in terms of the capabilities and techniques of the crime laboratory.

340 MANAGEMENT OF VOLUNTEERS IN CJA (3) The course develops an understanding of the importance of the volunteer movement in Criminal Justice Administration. It shows how volunteers have been and can be used in Criminal Justice Agencies. It analyzes the motives of volunteers and assists the professional in the screening and training of volunteers. It also discusses the recruitment and rewarding of volunteers.

354 CRIMINAL LAW (3) Principles, theories and doctrines of the law of crimes with a unified study of legal defenses; elements and proof in crimes of frequent concern; importance of criminal law at the enforcement level is considered from the crime prevention to the courtroom; case analysis.

355 EVIDENCE AND CRIMINAL PROCEDURE (3) Rules of evidence of particular import at the operation level in law enforcement; types of evidence; principles of admissibility; the attendance and production of witnesses, their competency and impeachment; arrest, search and seizure; use of force; Supreme Court decisions affecting this area of criminal justice administration.

356 LAW OF CORRECTIONS (3) Analysis of the legal dimension of sentencing; the correctional treatment of persons under sentence, and conditional release and

revocation with emphasis on administrative decision-making in the correctional process.

357 **CORRECTIONAL STRATEGIES** (3) Offender classification; special offender groups, treatment, custody, recidivism, strategies designed to change offender conduct.

359 **JUVENILE JUSTICE** (3) Structure and format of the juvenile justice system — police, courts and corrections; analysis and description of the organizational structure of each of the subsystems of the juvenile justice process; introduction to juvenile justice literature and research findings.

450 **PRACTICUM IN CRIMINAL JUSTICE ADMINISTRATION** (1-12) Educational and work experience in an actual criminal agency — law enforcement, courts, corrections and industrial security; applicable agency research project; periodic conference with criminal justice agency personnel and faculty advisor.

453 **POLICE ORGANIZATION AND ADMINISTRATION** (3) Organizational theory, budgeting, personnel management planning, information management theory, civil service, unions, management prerogatives, supervision, executive development, manpower distribution schemes, and policy development and execution as applied in both small and large law enforcement agencies. Prerequisites: CJA 250 and PSCI 240.

496 **SELECTED TOPICS IN CJA** (3) An intense analysis of selected topics in law enforcement, adjudication, and correctional fields. Intended for advanced undergraduates, graduates, and inservice professionals.

497 **INDEPENDENT STUDY** (1-3) Independent study is an activity initiated by the student to increase his/her already advanced knowledge in a particular academic discipline. The subject is examined in an intensive manner with guidance by a faculty member who has special expertise in that subject.

ECONOMICS (ECON)

101 **AMERICAN ECONOMY: MACRO** (3) An introduction to aggregate economics with emphasis on interdependence of sectors of an economy, aggregate concepts, determination of national income and fiscal and monetary policy for stabilization.

102 **AMERICAN ECONOMY: MICRO** (3) The mechanism of the free enterprise system: pricing, production, and employment under various market conditions; functional distribution of income; selected topics in modern theory of general equilibrium and welfare economics.

204 **HISTORY OF ECONOMIC THOUGHT** (3) A study of economic ideas from the eighteenth century to the present. A brief review of physiocracy and merchantilism followed by a closer survey of classical liberalism, pre-Marxist and utopian socialism. Marxism, neoclassicism, institutionalism and other contemporary developments.

205 **CONTEMPORARY ECONOMIC PROBLEMS** (3) Examination of some of our crucial economics problems; unemployment, inflation, poverty; also some of the minor issues; right-to-work, national debt, and of several international concerns, i.e., the Common Market.

311 **MONEY AND BANKING** (3) An inquiry into the monetary system of the U.S. Brief examination of historical development; the functioning of monetary policy is considered. Emphasis on the public/private nature of our banking system.

401 **LABOR RELATIONS** (3) Equal consideration is given to the market and institutional factors of labor management relations. The role of government especially as defin-

ed in major legislation is examined. Historical development of trade unions serves as an introduction.

497 **INDEPENDENT STUDY** (1-3) Independent study is an activity initiated by the student to increase his/her already advanced knowledge in a particular academic discipline. The subject is examined in an intensive manner with guidance by a faculty member who has special expertise in that subject. Prerequisite: Permission of instructor.

ELEMENTARY EDUCATION (EDEL)

090 **BASIC READING/STUDY SKILLS** (3) An individualized-prescriptive program designed for college students who need a remedial or corrective reading program. Does not count toward the total needed for graduation. 2 Lect., 1 Lab.

185 **ADVANCED READING/STUDY SKILLS** (2) An individualized-prescriptive program designed for students who need additional assistance in the area of developmental reading. 1 Lect., 1 Lab.

201 **PRE-PROFESSIONAL EXPERIENCES** (1) The course provides students of freshman standing with the following seminar experiences with elementary education: orientation to the Elementary Education Department and the Division of Professional Studies, examination of current goals of elementary education and the current expectations of modern elementary school teachers, study of principles affecting teaching-learning situations, study of observation criteria and procedures and informational advisement seminars.

202 **PRE-PROFESSIONAL EXPERIENCES** (2) The course provides students of sophomore standing with clinical experiences in elementary education which include: identification and analysis of current educational practices, brief episodes of exploratory teaching in an elementary school classroom, investigations of career possibilities and their requirements, an orientation to the Elementary Education Department and the Division of Professional Studies, and informal advisement seminars. 1 Lect., 1 Lab.

300 **BEGINNING SCHOOL YEARS** (3) A study of the developmental needs of the young child, theoretical bases for major teaching functions, current trends in activities, teaching procedures and materials in use in kindergarten through third grade. Observation in neighboring schools.

301 **OBSERVATION AND PARTICIPATION IN ELEMENTARY EDUCATION** (2) The course provides students of junior standing with the following observation, participation and professional guidance experiences: the opportunity to observe an elementary school classroom in action, orientation to the policies and practices of an elementary school, the opportunity to observe a competent in-service teacher in the performance of his or her duties, introduction to the administrative duties of an elementary classroom, the privilege of working with individual children, small groups of children and an entire classroom under supervision, and the opportunity to receive feedback on performance from both the cooperating teacher and the college supervisor. 1 Recit., 2 Lab.

305 **READING IN THE CONTENT AREA** (3) An investigation of the reading process as it applies to teaching students to read Social Studies, Science, English, Math, and Health textbooks in grades 1 through 12.

325 **DIAGNOSTIC AND REMEDIAL READING** (3) Tests and techniques to prevent, detect and correct reading difficulties; special methods and materials for problem readers. Prerequisite: EdEl 383.

330 ED **GUIDANCE AND COUNSELING TECHNIQUES** (3) (Summer Only) The responsibility of the teacher in the guidance program of the school; the identification of student problems; significant information and its use; techniques in guidance and counseling.

350 **CHILD DEVELOPMENT** (3) An interpretive description of human growth from conception through infancy, toddlerhood, pre-school and school years, adolescence and into maturity.

360 **CHILDREN'S LITERATURE** (3) A study of the history of children's literature; types of literature useful for children in pre-school and elementary school; techniques of dramatic reading, story telling and choral speaking.

380 **TEACHING MUSIC** (3) Designed for the elementary education major to develop the philosophy of music education, the ability to read music, the use of the singing voice, and the knowledge of music methods. Includes the use of classroom instruments, including piano, and the presentation of current music materials available for K-6. 3 Lect., 1 Lab.

383 **TEACHING OF READING IN THE ELEMENTARY SCHOOL** (3) The reading process; normal development; characteristics of children learning to read; principles, problems, materials and techniques for the teaching of reading in the elementary school.

384 **TEACHING OF ELEMENTARY SCHOOL MATHEMATICS** (3) Methods of teaching mathematics, examination of curriculum and materials pertinent to teaching mathematics in the elementary school, and development of mathematical skills required of the elementary school teacher.

386 **TEACHING OF SOCIAL STUDIES** (3) Principles, problems, materials and techniques for the teaching of social studies in the elementary school.

387 **TEACHING OF SCIENCE** (3) Principles, problems, materials and techniques for the teaching of science in the elementary schools.

392 **TEACHING ART IN ELEMENTARY GRADES** (3) The philosophy and principles of art education in the elementary curriculum; experience in the development of self-expression through a variety of materials and activities as the basis for understanding and evaluating children's work. 3 Lect., 2 Lab.

400 **STUDENT TEACHING** (12) Practice teaching under supervision of master teachers. Required of all students working for a degree in teacher education.

401 **SEMINAR IN ELEMENTARY EDUCATION** (2) Taken in the senior year; orientation and critiques concerned with classroom problems; examination of school law, school organization and administration.

402 **SELECTED TOPICS IN ELEMENTARY EDUCATION** (1-3) The course is designed to give students the opportunity to carry out in-depth studies into various teaching techniques appropriate for use at the elementary school level. The course includes lecture discussions, seminar periods, and the use of resource persons. Heavy emphasis is placed on student leadership and participation as well as on the reading and discussion of recent educational literature. Open to in-service teachers and majors who have completed student teaching.

403 **COMMUNICATION SKILLS WORKSHOP FOR ELEMENTARY SCHOOL TEACHERS** (3) The course is designed as a workshop experience for undergraduate students who have completed EdEl 383 and for in-service classroom teachers. Emphasis will be placed on an open environment in which undergraduate students, practicing

classroom teachers, and the instructor will investigate and share techniques to be used by the elementary school teachers to improve the total communication skills of children in elementary school classrooms. Prerequisite: EdEl 383.

488 **INFORMAL DIAGNOSIS OF READINESS IN ELEMENTARY TEACHING** (3) The course is designed to help teachers become more aware of specific cognitive and affective factors which influence a child's readiness to learn. Emphasis will be placed on informal assessment of a child's cognitive and affective behavior as a basis for making decisions about instruction for a child. The course will provide experiences with the development and use of informal techniques which assess a child's cognitive and affective domain.

489 **ENVIRONMENTAL EDUCATION FOR ELEMENTARY TEACHERS** (3) A study of the methods, materials, and science background necessary to teach environmental education in the elementary school. Emphasis will be on both science content and psychological grade placement of various activities.

ID 285 **MODULE A: MAINSTREAMING** (1) (See page 150 for course description.)

ID 285 **MODULE B: READING** (1-3) (See page 151 for course description.)

ID 285 **MODULE C: GIFTED CHILDREN** (1) (See page 151 for course description.)

ID 499 **INTERDISCIPLINARY SEMINAR IN EARLY CHILDHOOD EDUCATION** (2) (See page 151 for course description.)

ENGLISH (ENG)

090 **BASIC WRITING SKILLS** (3) A course in basic English skills taught on the remedial level and designed to raise the student's level of literacy to the point where he is able to do college-level reading and writing. Does not count toward the total needed for graduation.

112 **COMPOSITION I** (3) An intensive course in reading, writing and research on the college level. The reading and writing of expository prose will be emphasized, analytical and critical thinking stressed.

113 **INTRODUCTION TO LITERATURE** (3) An introduction to poetry, fiction and drama, this course is designed to help students read literature with understanding and enjoyment.

200 **SURVEY OF ENGLISH LITERATURE I** (3) Masterpieces of English Literature from the Anglo-Saxon period to the end of the eighteenth century with emphasis on interpretation and critical evaluation. Prerequisite: Grade of C in ENG 112.

201 **SURVEY OF ENGLISH LITERATURE II** (3) A continuation of ENG 200. English literature from the eighteenth century to the present. Prerequisite: Grade of C in ENG 112.

202 **SURVEY OF AMERICAN LITERATURE I** (3) Major American writers from the colonial period to the Civil War. Prerequisite: Grade of C in ENG 112.

203 **SURVEY OF AMERICAN LITERATURE II** (3) A continuation of ENG 202. American literature from the Civil War to the present. Prerequisite: Grade of C in ENG 112.

210 **LITERATURE OF THE WESTERN WORLD I** (3) Literary classics from ancient times to the close of the Renaissance. Prerequisite: ENG 112.

211 **LITERATURE OF THE WESTERN WORLD II** (3) A continuation of ENG 210 from the Age of Reason to the present. Prerequisite: ENG 112.

213 **CRIME IN LITERATURE** (3) The problem of crime and the necessity to deal with it has involved creative artists in all major European and American cultures. The literature is vast. The present course provides a general introduction to some of the representative works. They have been selected because they deal with the anguish of choice that confronts the criminal and society alike when they become locked into an unwilling relationship. Prerequisite: ENG 112.

219 **ENGLISH** (3) An introduction to the work of major black American authors, the course will survey the development of black American literature and investigate its relationship to black American and white American literature. Prerequisite: English 112.

220 **SPECIAL TOPICS IN LITERATURE** (3) A flexible, open-ended course with specialized topics of interest to non-English majors. Topics and instructors will be announced prior to pre-registration period each semester. Course may be repeated for credit. Prerequisite: ENG 112.

225 **ENGLISH GRAMMAR** (3) A study of an introductory transformational grammar of English with attention given to a traditional analysis and to usage.

226 **HISTORY OF THE ENGLISH LANGUAGE** (3) A study of the development of the English language from Old English to modern times with special attention to the causes of linguistic change.

230 **PRACTICAL WRITING** (3) An intensive course for students who wish instruction and practice in report writing, business writing, and technical writing. Emphasis will be placed on the particular writing needs of each student.

232 **INTRODUCTION TO FOLKLORE** (3) A general introduction to folklore with emphasis on the oral tradition in British-American ballads, folktales, customs, beliefs, observances, speech, and material culture.

290 **INTRODUCTION TO FILM CRITICISM** (3) Analysis and evaluation of film through a study of its elements.

291 **FILMS & FILMMAKERS** (3) Analysis and evaluation of the feature-length film as a literary form.

300 **TEACHING ENGLISH IN THE SECONDARY SCHOOL** (3) Examination of the objectives, professional requirements, and specialized problems of English instruction; survey of material and aids for the teaching of the language arts in junior and senior high school; analysis of methods and trends, and practice in the development and programs of study.

302 **THE SHORT STORY** (3) Close reading and critical analysis of the short story as a literary form.

304 **THE NOVELETTE** (3) An historical survey from Boccaccio to Katherine Ann Porter.

306 **RECENT LITERATURE** (3) A study of the literature of the past ten years, predominantly English and America.

313 **COMPOSITION II** (3) A review of previous composition courses and an advancement of reading and writing and research skills related specifically to student's advanced work in his major area of study. To be taken in the junior year and to be passed with a grade of "C" or better before graduation.

315 **BLACK RENAISSANCE** (3) A study of the Negro Renaissance, also known as the Harlem Renaissance (1910-1940). Black American writers produced much important literature during the Renaissance. The course will involve reading and discussing this literature, and exploring its significance both for black and white Americans.

330 **LITERARY CRITICISM** (3) Major theories of literary criticism from Aristotle to the present with application. Admission by consent of instructor.

333 **ADVANCED COMPOSITION** (3) Intensive writing in area of each student's principal interest. Students not majoring in English admitted by consent of instructor.

335 **CREATIVE WRITING** (3) A discussion of theory and the relation of theory to practical writing situations. An exploration of writing which takes into consideration both the direction of the students' interests and the formal properties of fiction, poetry, or play.

336 **AMERICAN LITERATURE TO 1835** (3) A study of major seventeenth and eighteenth century American writers emphasizing the literary and philosophical aspects of their work and locating them in the continuum of American literature and culture.

337 **THE AMERICAN RENAISSANCE** (3) A study of major mid-nineteenth century American writers with emphasis upon their work as works and as a part of a continuing literature and culture.

338 **AMERICAN REALISM AND NATURALISM** (3) A study of major Realists and Naturalists in American literature with an emphasis upon their works, their literary apology, and their influence.

339 **CONTEMPORARY AMERICAN FICTION** (3) A study of major writers of fiction emphasizing their works, their social consciousness, their influence on their own generation, and their probable influence on following ones.

340 **MIDDLE ENGLISH LITERATURE** (3) A study of representative work from the Anglo-Saxon period to 1500.

345 **CHAUCER** (3) A study of Chaucer in relation to his times with special emphasis on the Canterbury Tales and Troilus and Cressida.

350 **WRITING WORKSHOP** (3) A workshop in the writing of fiction and poetry and/or drama. The major emphasis will be upon application of techniques, development of sensibility, uses of the imagination, and revision of work. May be repeated. Prerequisite: Eng. 335.

355 **SIXTEENTH CENTURY POETRY AND PROSE** (3) Poetry from Shelton and Wyatt to Sidney and Spenser; prose from More and Eliot to Hooker and Nashe.

358 **SHAKESPEARE** (3) Selected earlier plays of Shakespeare; interpretation and evaluation with attention to his development as a dramatist and poet.

359 **SHAKESPEARE** (3) A continuation of Eng. 358. Selected later plays.

360 **SEVENTEENTH-CENTURY ENGLISH LITERATURE** (3) Prose and non-dramatic poetry with emphasis on Jonson, Donne, and Dryden.

365 **MILTON** (3) The poet, the times, and the major works.

370 **EIGHTEENTH-CENTURY ENGLISH LITERATURE** (3) A study of major English writers representing basic attitudes and values of the Age of Reason and the pre-Romantic movement.

375 **DIRECTED WRITING** (3) Individual guidance and instruction in the composition of a novelette, a collection of stories or poems, or a play. Prerequisites: Eng. 335, 350 and consent of instructor.

380 **THE ROMANTIC MOVEMENT** (3) Wordsworth, Coleridge, Byron, Shelley, Keats, and their contemporaries; social and ideological factors; poetic theory.

382 **VICTORIAN POETRY AND PROSE** (3) Major British writers from 1830 to 1900; social and intellectual influences of the period.

384 **THE BRITISH NOVEL TO 1870** (3) Principal British novelists from Defoe to Dickens examined in relation to social and intellectual trends; analysis of form.

385 **THE BRITISH NOVEL SINCE 1870** (3) A continuation of Eng. 384 to the present.

388 **ENGLISH DRAMA TO 1890** (3) A survey of English dramatic literature beginning with the medieval morality, mystery, and miracle plays.

389 **WORLD DRAMA** (3) The work of Continental dramatists to Ibsen.

390 **MODERN DRAMA** (3) The work of major dramatists, primarily English and American from Ibsen to the present; analysis of techniques of composition, production, and performance.

391 **MODERN POETRY** (3) Analysis of poetic method and of the integral nature of form and meaning in British and American poets from G. M. Hopkins to Dylan Thomas.

401 **SEMINAR IN ENGLISH STUDIES** (3) Intensive reading and discussion of a major writer; class enrollment restricted to twelve. Basic bibliographical sources used for several long papers. Open only to juniors and seniors by consent of the instructor.

409 **COMEDY OF MANNERS** (3) A comprehensive survey of the genre from 1660 to the present with concentration upon Etherege, Wycherley, Congreve, Sheridan, and Oscar Wilde.

497 **INDEPENDENT STUDY** (1-3) (See page 32 for course description.)

FISH CULTURE (BFC)

213 **FISH CULTURE I** (3) An introduction to the modern scientific culture of coldwater fish, specifically the salmonids. Basic procedures are covered with an emphasis on their practical and economical application to government and commercial hatcheries.

214 **FISH CULTURE II** (3) A continuation of Biology Fish Culture 213. It emphasizes the culture of coolwater and warmwater fishes including gamesfishes, baitfishes and exotic species such as carp and tilapia.

215 **FISH PATHOLOGY** (2) A consideration of the diagnosis and treatment of diseases commonly found in hatchery fish. Diseases of bacterial, viral and parasitic and environmental origin are studied together with recommended treatment for each.

216 **FISH NUTRITION** (2) A study of the nutritional requirements of fish including a consideration of the relative efficiency with which various foods and feeding methods contribute to growth and food production of fish in hatcheries.

217 **FISH MANAGEMENT** (2) A consideration of the interrelationships of fishes and habitats, emphasizing the ultimate use of hatchery reared stock in commercial and governmental activities.

218 **LITERATURE REVIEW AND REPORTS IN FISH CULTURE** (1) A study of scientific literature of fish culture, with special emphasis on its organization and retrieval and the writing of reports.

FRENCH (FR)

101 **INTRODUCTORY FRENCH I** (3) For students who have not previously studied French. Elements of grammar and reading, intensive drill in pronunciation, aural comprehension and speaking. Language lab attendance required twice a week. 3 Lect., 2 Lab.

102 INTRODUCTORY FRENCH II (3) Continuation of Fr. 101. Prerequisite: One year of secondary school French or Fr. 101 or its equivalent. Language lab attendance required twice a week. 3 Lect., 2 Lab.

201 INTERMEDIATE FRENCH I (3) Independent reading, grammar review and further practice in aural comprehension and speaking. Prerequisite: Two years of secondary school French or one year of college French. Language lab attendance required twice a week. 3 Lect., 2 Lab.

202 INTERMEDIATE FRENCH II (3) Continuation of Fr. 201. Prerequisite: Three years of secondary school French or Fr. 201. Language lab attendance required twice a week. 3 Lect., 2 Lab.

205 PHONETICS AND PRONUNCIATION (1) A systematic study of French phonemes: pronunciation and phonetic transcription. Emphasis on phrase rhythm, musical accent. Theory and practice. Required of French majors. Prerequisite: Fr. 101 or equivalent. 1 Lect., 1 Lab.

280 TOPICS IN FRENCH CIVILIZATION (HISTORY) (3) A brief survey of French history, with particular attention to major events and personalities. Prerequisite: Fr. 202 or equivalent training.

281 TOPICS IN FRENCH CIVILIZATION (GEOGRAPHY) (3) A study of the geography of French-speaking countries. Prerequisite: Fr. 202 or equivalent training.

282 TOPICS IN FRENCH CIVILIZATION (AFRO-FRENCH LITERATURE AND CIVILIZATION) (3) A study of Black literature written in French in Africa and the West Indies. Prerequisite: Fr. 202 or equivalent training.

283 TOPICS IN FRENCH CIVILIZATION (CONTEMPORARY PROBLEMS) (3) A study of the problems facing the people of French-speaking countries today. Prerequisite: Fr. 202 or equivalent training.

300 CONVERSATIONAL FRENCH AND CIVILIZATION (3) Intensive practice in oral French intended for students interested in developing a higher degree of fluency. Emphasis on topics of cultural, social, economic, and political nature. May be taken concurrently with Fr. 202 upon recommendation of the instructor. Required of French majors.

300L SECONDARY METHODS — FRENCH (3) A study of the teaching of French with an emphasis on the problems, methods and materials associated with language teaching. Prerequisite: Junior standing. Required of all French majors in teaching education program.

305 ADVANCED FRENCH CONVERSATION (3) An intensive training in oral self-expression for the student who desires a still higher degree of fluency. Specially programmed topics for each class session will be assigned, with emphasis on encouraging the students to carry on discussion in more detail and at greater length. Prerequisite: Fr. 300 or consent of instructor. 3 Lect., 2 Lab.

320 ADVANCED FRENCH STRUCTURE (3) The study and practical application of the structural patterns of French with concentration on the phonology, morphology and syntax of the language. Prerequisite: completion of Fr. 202 or equivalent training. Required of French majors.

330 SURVEY OF FRENCH LITERATURE I (3) Selected readings in the works of major French writers through the eighteenth century, outside reading and reports in French; consideration of literary movements, style and form. Prerequisite: Fr. 202 or equivalent training. Required of French majors.

331 SURVEY OF FRENCH LITERATURE II (3) Selected readings in the works of major French writers since 1800; outside reading and reports in French; consideration of literary movements, style and form. Prerequisite: Fr. 202 or equivalent training; Fr. 330 also recommended. Required of French majors.

339 FRENCH LITERATURE OF THE MIDDLE AGES AND RENAISSANCE (3) Reading and discussion of the beginnings of French literature to the end of the 16th century. Prerequisites: Fr. 330 and 331.

340 FRENCH CLASSICAL LITERATURE (2) Critical readings and discussion of the major dramatic works of Corneille, Moliere and Racine with supplementary reading on general background. Prerequisites: Fr. 330 and 331.

341 FRENCH LITERATURE OF THE ENLIGHTENMENT (3) Reading and discussion of the works of Voltaire, Rousseau, and Diderot. Prerequisites: Fr. 330 and 331.

342 CURRENTS IN NINETEENTH CENTURY FRENCH LITERATURE (3) The works of French authors as well as the main currents and form of literary expression from the beginning of romanticism to the end of the century: Hugo, Balzac, Stendhal, Flaubert, Zola. Prerequisites: Fr. 330 and 331.

343 ASPECTS OF TWENTIETH CENTURY FRENCH LITERATURE (3) Development of the novel: Gide, Alain-Fournier, Proust, Mauriac, Malraux, Sartre, Camus, Bernanos, St. Exupery, Green and the nouveau roman. Reading and discussion of major works. Written report. Prerequisites: Fr. 330 and 331.

350 DEVELOPMENT OF FRENCH POETRY (3) A study of the major works of poets from Villon to the present. Emphasis on interpretation and diction. Study of the French poetical system. Prerequisites: Fr. 330 and 331.

370-380 FOREIGN STUDY (Credit Arranged) Foreign study is open to students who wish to continue the study of French abroad. Plans for foreign study should be presented at least two semesters prior to departure and should be approved by the department chairperson. Number of credits granted will be based upon validated credentials presented to the department. The student should register for French 370-380 prior to departure. Regular periodic reports must be made during the student's residence abroad.

400 SENIOR SEMINAR (Credit Arranged) Special study projects in French language and literature; independent reading in the defined areas followed by written analytical reports in French. Open to seniors and in exceptional cases to juniors. May be repeated for credit.

405 HONORS COURSE FOR FRENCH MAJORS (Credit Arranged) An individual problems course. Open to qualified seniors with consent of the department.

497 INDEPENDENT STUDY (See page 32 for course description.)

GEOGRAPHY (GEOG)

102 HUMAN GEOGRAPHY (3) An introduction to geography and a study of human communities in their relation to the environment; including a systematic study of population and culture as reflected in settlement, economic activities, land use and their resulting spatial patterns.

111 PHYSICAL GEOGRAPHY (3) Introduction to the nature of geography and the physical aspects of the environment of man; the earth and its planetary relations; selected topics in physical geography, including weather, climate, soil, landforms, the principles of map projections and interpretation.

222 **ENVIRONMENTAL LAND USE AND NATURAL RESOURCES** (3) An analysis of environmental land use and natural resources as a response to the physical and cultural conditions of the past and present; an evaluation of the major divisions of land usage and the resulting interrelationship of areal patterns.

230 **INTRODUCTION TO CARTOGRAPHY** (4) An introduction to the principles and tools of basic cartography. Emphasis on map projections, map design and map reproduction. The student will generally find it necessary to work independently in the cartography lab outside of class. 2 Lect., 3 Lab.

231 **WORLD OF MAPS AND MAPPING** (3) Introduction to the use and evaluation of projections, maps, charts and aerial photographs. Emphasis on coordinate systems and topographic maps.

282 **WORLD REGIONAL GEOGRAPHY** (3) Regional analysis and study of the earth as the home of man. Specific areas and types of man-land relationships are studied as examples of the world variety of human adjustments to and adaption of the natural environment. Course particularly well suited for future social science teachers.

312 **WEATHER AND CLIMATE** (3) A study of the basic principles of meteorology and climatology, including the synoptic approach to weather forecasting and the human use of climatological data and climatic classifications.

321 **GEOMORPHOLOGY** (3) The evaluation and development of land forms and the principal theories of landform development pertaining to structure, process and state; topographic maps, profiles and the appraisal of geologic data from both field and laboratory studies. Prerequisite: Geog. 111 or permission of the instructor.

350 **URBAN GEOGRAPHY** (3) An analysis of the localization, structure and function of urban settlements and their supporting areas, progressing from simple relationships in small settlements to the complexities of modern metropolitan regions.

351 **POPULATION GEOGRAPHY** (3) Studies the spatial aspects of world population numbers, densities, and qualities; emphasizing the economic and social characteristics and mobility of the world's population.

360 **ECONOMIC GEOGRAPHY** (3) Relates modern methods of geographic analysis to the study of world patterns of primary projection: agriculture, herding, fishing, forestry, and mining.

361 **GEOGRAPHY OF MANUFACTURING** (3) Analyzes the activities of secondary production. Covers the distribution and consumption of minerals; principles and theory of industrial location; and an analysis of selected industries and manufacturing regions.

362 **ECONOMIC GEOGRAPHY OF SERVICE AND RETAIL ACTIVITIES** (3) Course considers the geography of economic activities which do not produce a product, but perform economic functions by saving time and distance or by providing convenience. These consumer oriented economic activities currently employ approximately 65% of the American labor force.

363 **URBAN LAND USE DEVELOPMENT** (3) This course will demonstrate that urban and suburban land use patterns are quite understandable and spatially ordered. Land use development that is wise and prudent requires an understanding of urban spatial problems, the spatial character of urban activities and the operation of land as a useful and productive urban economic resource.

370 **POLITICAL GEOGRAPHY** (3) A systematic analysis of the geographical nature, policy, and power of the state. Analyzes the growth and development of states,

boundary problems, population distribution, colonies, and internal and international political theories.

371 **HISTORICAL GEOGRAPHY** (3) A survey of the human geography of the past. Detailed study of topics including the characteristics of colonization, settlement and cultural landscape development in the evolving landscape. Special reference is made to American historical geography.

380 **GEOGRAPHY OF THE UNITED STATES AND CANADA** (3) A geographic analysis of the physical environment, resources, industries, population and settlement of Anglo-America north of the Rio Grande. Particular emphasis on geographic regionalism and geographic problems common to the area.

381 **GEOGRAPHY OF PENNSYLVANIA** (3) Analysis of the regional patterns of Pennsylvania: topography, climate, water resources, mineral resources, and the historical development of economic regions within the State.

390 **REGIONAL ANALYSIS OF SELECTED WORLD AREAS** (3) A geographical interpretation of the spatial distribution of physical socio-economic, political, settlement, and other cultural characteristics of selected world areas. Students may repeat course for different areas.

402 **ADVANCED HUMAN GEOGRAPHY** (3) A systematic study of the approaches, concepts, and methods of human geography. Emphasis is given to man-environment systems and the spatial structure of human behavior within a thematic rather than a regional framework.

470 **WORLD PROBLEMS IN GEOGRAPHY** (1-2) Regional treatment of man-land environmental problems approached from the point-of-view of political geography, cultural geography, or economic geography.

492 **FIELD STUDIES OR FIELD METHODS IN GEOGRAPHY** (3) Introduction to the tools and techniques of geographic field investigation. Observation, note-taking, classification and mapping based on original field work is experienced.

497 **INDEPENDENT STUDY** (3) (See page 32 for course description.)

498 **SENIOR SEMINAR IN GEOGRAPHY** (3) An overview of the nature, structure, content, concepts, techniques, and methodologies of academic geography. Prerequisite: Geography major with junior or senior class standing.

499 **HONORS COURSE IN GEOGRAPHY** (3) A prerequisite of 18 hours in upper-level geography with at least a B average. The course is designed for upper-division students who can qualify for independent research which will be conducted under the direction and supervision of a designated faculty member of the Department of Geography.

GEOLOGY (GEOL)

101 **EARTH RESOURCES AND ENERGY** (3) This course deals with our natural resources, metallic, non-metallic and fossil fuels. Points emphasized include the worldwide abundance and distribution of the resources and the economics of the extractive industries. The fossil fuels, of extremely finite supply, lead into alternative sources of energy and their feasibility. 2 Lect., 2 Lab.

121 **PHYSICAL GEOLOGY** (3) A study of the solid portion of the earth, the materials of which it is composed and the processes which are acting on it. Included are such topics as rocks and minerals, weathering and geologic structure. 2 Lect., 2 Lab.

122 **HISTORICAL GEOLOGY** (3) A study of earth history using the principles of Geol. 121. This includes theories of earth origin, fossils, geologic time and the various techniques used to unravel geologic history. Emphasis is placed on collection and interpretation of evidence gathered in the field and from library research. 2 Lect., 2 Lab.

232 **MINERALOGY** (3) A detailed study of minerals emphasizing their composition, origin, mode of occurrence, alteration, classification and identification. Prerequisite: One year of college chemistry, which may be taken concurrently. 1 Lect., 4 Lab.

251 **PALEONTOLOGY** (3) A detailed study of the fossil remains of animals and plants. Special emphasis is given to the methods of studying fossils, the structures by which the fossils are identified, similarities of fossils to living organisms, and the significance of fossils. 1 Lect., 4 Lab.

351 **STRUCTURAL GEOLOGY** (3) The analysis of geologic structures and their causal mechanism is approached through applied physics and mathematics. Understanding of the simple geologic structures leads into the worldwide tectonic pattern and the concepts of "continental drift" and "sea floor spreading." Prerequisite: Permission of instructor.

352 **STRATIGRAPHY AND SEDIMENTATION** (3) An extensive study of the genesis and distribution of the sedimentary rocks and the reconstruction of the paleoenvironment. Sedimentary processes and environments of deposition will be studied through detailed analysis of reference sections using the principles of correlation, facies changes, tectonics, and paleontology. Prerequisite: Permission of instructor. 2 Lect., 2 Lab.

372 **AERIAL PHOTO INTERPRETATION** (3) The interpretation of aerial photographs from a geologic standpoint. Emphasis will be placed on recognizing the underlying geologic structures. It is recommended that Geol. 121 be taken prior to or concurrently. 2 Lect., 2 Lab.

401 **FIELD TECHNIQUES IN GEOLOGY** (3) A field oriented course where the student learns actual data collection methods. Methods vary with the problem, but include planning field work, identifying and measuring all parameters of the outcrop and sampling techniques. Different surveying methods are used in locating outcrops. Interpretation of the field data is an integral part of the course. 1 Lect., 4 Lab.

412 **GLACIAL GEOLOGY** (3) An analytical study of glaciers and the Pleistocene epoch. The origins and mechanics of glacier motion and the landscape features produced during glaciation will be studied. Causes of ice ages and their distribution through geologic time and the methods of Pleistocene stratigraphy will also be considered. Prerequisite: Geol. 121.

450 **ENVIRONMENTAL GEOLOGY** (6) This is a rigorous field-oriented course. Selected topics of Physical Geology are pursued in depth and related to man's use and abuse of his environment. Morning lectures are followed by field trips to observe the phenomena. During the first four weeks the student will also learn geologic investigative techniques. The fifth week the students will spend full time in the field working on an independent problem. There is a written scientific paper of the independent problem. Prerequisite: Consent of the instructor. 2 Lect., 8 Lab.

497 **INDEPENDENT STUDY** (1-3) (See page 32 for course description.)

HEALTH AND PHYSICAL EDUCATION (HPE)

100 HEALTH (PERSONAL AND COMMUNITY) (2) Health education to include health services, health instruction and health environment dealing with contemporary principles, practices and concepts serving personal, family and community health. Includes individual counseling and guidance.

101, 102, 203 PHYSICAL EDUCATION (1) Emphasis on the development of fundamental skills in season activities for individual, dual and team sports. Participation in lifetime activities to include aquatics and various areas of dance. One credit per semester. 2 Lab.

205 INTERCOLLEGIATE ATHLETICS (1) Course is designed as an upper level skill class available only to individuals on varsity teams with the following stipulations: allowed to enroll only one time, admission by the coach of particular sport, and to receive credit the student must remain in the sport involved for the entire season. 2 Lab.

225 WATER SAFETY INSTRUCTION (2) The course will prepare students with the knowledge and practical experience in teaching swimming (ten basic strokes and basic spring board diving) from the non-swimmer level to advanced senior life saving. Prerequisite: Successful completion of HPE 203, Advanced Life Saving. 1 Lec., 2 Lab.

300 TECHNIQUES OF COACHING TRACK AND FIELD (3) The participation in actual training techniques in track and field. An attempt to show prospective coaches what an athlete experiences in his training and an opportunity to select various programs and techniques to meet individual needs. Planning, organizing equipment for a track program will be studied.

305 COACHING AND OFFICIAL WRESTLING (3) Practical training in the areas of wrestling fundamentals, match and tournament wrestling, strategy and the psychology of coaching. Practical training in fundamentals of officiating, rule interpretation and preparation for taking tests to become an approved official.

310 SPECIAL PHYSICAL EDUCATION FOR THE EXCEPTIONAL CHILD (3) A comprehensive analysis of the physically, emotionally, and socially handicapped student. Includes selected activities and achievement standards in the field of health, physical education and athletics. These activities will be changed from year to year to assure that a progressive sequence of learning is presented.

315 ATHLETIC TRAINING (3) A course designed to provide experiences in application of various methods in treatment of athletic injuries. A study of preventive measures and medical management of athletic injuries. Experience in use of exercise techniques and physical modalities. 1 Lect., 1 Recitation, 2 Lab.

320 BASIC FOOTBALL (3) The student is given the opportunity to acquaint himself with the methods, techniques and psychology used in coaching football. The purpose of the course is to teach the methods, techniques and psychology used in coaching football, to give the prospective coach a knowledge of the personal problems in motivating and handling individual players, to teach the prospective coach the various types of offensive and defensive formations employed in football, to give the prospective coach an understanding of the need for, and familiarity with a detailed daily and progressively integral program for the entire season, and to give the prospective coach an understanding of the importance of the care and careful purchase of equipment. 1 Lect., 1 Recitation, 2 Lab.

330 COACHING BASKETBALL (3) Practical training in the areas of basketball fundamentals, individual and team play, strategy and the psychology of coaching. This course

will supply practical knowledge and techniques in the skills needed for basketball coaching. 1 Lect., 1 Recitation, 2 Lab.

340 **SAFETY AND FIRST AID (STANDARD AND ADVANCED)** (3) Study and application of the methods, techniques and psychology used in first aid and safety. Basic, Multi-Media, SFAPS and CPR Certification included. 1 Lect., 1 Recitation, 2 Lab.

350 **METHODS I, TEACHING HEALTH AND PHYSICAL EDUCATION IN ELEMENTARY SCHOOLS** (2) Principles, problems, materials and techniques for conducting the health and physical education programs in the elementary schools.

360 **KINESIOLOGY** (3) Analysis of human motion based on anatomical and mechanical principles. Fundamental principles of muscle action pertaining to movement. Applications of mechanics to sports activity. Prerequisites: BIO 331 and 332.

370 **PHYSIOLOGY OF EXERCISE** (3) Critical analysis of physiological bases of muscular activity with special attention to general effects of exercise on body function. Prerequisites: BIO 331, 332, HPE 360.

375 **ADVANCED ATHLETIC TRAINING** (3) A course designed to use exercise techniques and physical modalities. The physiological basis, indications and contraindications are presented. Also a review of special problems in the management of an athletic training program. 2 Lect., 2 Lab.

390 **COACHING BASEBALL** (3) Course will provide students the knowledge, skills and attitudes to prepare them to coach high school baseball programs dealing with organization factors of coaching as well as the strategies and skills of the game. Safety factors and the handling of minor injuries will be covered and special stress will be put on the educational aspect of coaching. Special field instruction will be provided when practical.

GERMAN (GER)

101 **INTRODUCTORY GERMAN I** (3) Introductory elements of grammar and reading, intensive drill in pronunciation, aural comprehension and speaking. Language lab attendance is required twice weekly. 3 Lect., 2 Lab.

102 **INTRODUCTORY GERMAN II** (3) Continuation of German 101. Prerequisite: Completion of Ger. 101 or equivalent competence. Language lab is required twice weekly. 3 Lect., 2 Lab.

201 **INTERMEDIATE GERMAN I** (3) A review of the structure of the German language with a view toward improving the skills of aural comprehension, speaking, reading and writing. Prerequisite: Completion of Ger. 102 or equivalent competence. Language lab attendance is required twice weekly. 3 Lect., 2 Lab.

202 **INTERMEDIATE GERMAN II** (3) A continuation of German 201 with emphasis on the further development of the skills, basing such development upon readings taken from actual literary and cultural selections. Prerequisite: Completion of Ger. 201 or equivalent competence. Language lab attendance required twice weekly. 3 Lect., 2 Lab.

205 **PHONETICS AND PRONUNCIATION** (1) A systematic study of German phonetics, phonemics, pronunciation, intonation and rhythm. The theory of the speech and articulatory mechanisms will be studied and extensive practice exercises, both in class and in the laboratory, will develop the students' capability in proper pronunciation. Prerequisite: Ger. 102 or equivalent competency. 1 Lect., 1 Lab.

300 **CONVERSATIONAL GERMAN AND CIVILIZATION** (3) Intensive practice in oral German intended for students interested in developing a higher degree of fluency in the spoken language. Emphasis on topics of cultural, social, economic and political nature. May be pursued concurrently with Ger. 202 upon recommendation of the instructor. Required of all German majors.

300L ED **SECONDARY METHODS — GERMAN** (3) A study of the teaching of German with emphasis on the problems, methods and materials associated with language teaching. Prerequisite: Junior standing. Required of all German majors in teacher education program. (This is a requirement for teacher certification and credits so derived do not apply toward the major in German.)

305 **ADVANCED GERMAN CONVERSATION** (3) An intensive training in oral self-expression for the student who desires a still higher degree of oral fluency. Specially programmed topics for each class session will be assigned, with emphasis on encouraging the student to carry on discussion in more detail and at greater length. Prerequisite: Ger. 300 or equivalent competence.

320 **ADVANCED GERMAN STRUCTURE** (3) The study and practical application of the structural patterns of German with concentration on the phonology, morphology and syntax of the language. Prerequisite: Completion of Ger. 202 or equivalent competence. Required of all German majors.

321 **COMPOSITION AND STYLISTICS** (3) Concentration on the development of self-expression in the written skills. Emphasis on synonymic development of expression and stylistic writing. Frequent written assignments, as well as at least one significant assignment of a critical nature will be presented. This course is intended for all German majors and especially for those who intend to teach German or pursue graduate work. Prerequisites: Completion of Ger. 202 (or equivalent preparation) and recommendation of instructor.

330 **SURVEY OF GERMAN LITERATURE I** (3) This course is designed to acquaint the student with some of the major literary movements and representative writers from 1750 to present. Prerequisites: Completion of Ger. 202 or equivalent preparation. Required of all German majors.

331 **SURVEY OF GERMAN LITERATURE II** (3) Sequel to Ger. 330. The earliest periods of German literature from 800-1750. Prerequisites: Completion of Ger. 202 or equivalent competence; Ger. 330 also recommended. Required of all German majors.

335 **PROSEMINAR** (3) Selected topics from list I or other topics upon arrangement. Open to qualified students with sophomore standing or above. Prerequisite: Completion of Ger. 202 or equivalent competence. May be repeated for credit.
SEMINAR TOPICS I

1. Geographic, economic, technical, scientific and industrial aspects of the German speaking lands
2. German Literature of the 18th Century
3. German Lyric Poetry
4. The German Novel
5. The "Novelle"
6. German Drama

360 **GERMAN SEMINAR** (3) Selected topics from list II or other topics upon arrangement. Open to qualified students with junior standing or above. Prerequisite: Completion of Ger. 202 or permission of advisor and/or instructor. May be repeated for credit.

SEMINAR TOPICS II

1. Historic and political structures, religion and philosophy in the German speaking lands.
2. German Literature of the 18th Century.
3. German Lyric Poetry
4. The German Novel
5. The "Novelle"
6. German Drama

370-380 **FOREIGN STUDY** (Credit arranged) Foreign study is open to students who wish to continue the study of German abroad. Plans for foreign study should be approved by the department chairperson. Number of credits granted will be based upon validated credentials presented to the department. The student should register for German 370-380 prior to departure. Regular periodic reports must be made during the student's residence abroad.

400 **SENIOR SEMINAR** (3) Selected topics from list III or other topics upon arrangement. Open to qualified students with senior standing or juniors by permission of instructor and advisor. May be repeated for credit.

SEMINAR TOPICS III

Heinrich Boll
Bertolt Brecht
Heinrich Heine
Friedrich Durrenmatt
Goethe
Schiller
Grass
Frisch
Hesse

497 **INDEPENDENT STUDY** (See page 32 for course description.)

HISTORY (HIST)

101 **WESTERN CIVILIZATION I** (3) A survey of significant ideas, events, and cultural developments in Western history from the emergence of ancient civilization to early modern times. (Circa 1660)

102 **WESTERN CIVILIZATION II** (3) A continuation of History 101. From early modern times to the present.

104 **THE WORLD IN THE TWENTIETH CENTURY** (3) A study of the forces and concepts operating in the modern world with emphasis on the trouble spots at the present time. For non-history majors only.

201 **AMERICAN HISTORY THROUGH THE CIVIL WAR** (3) A survey of American history covering the 17th century colonization; independence and formation of the federal union; nationalism, sectionalism and growth of democracy in the 19th century; and the Civil War.

202 **AMERICAN HISTORY — RECONSTRUCTION TO THE PRESENT** (3) A continuation of History 201, covering significant trends and events in the rise of modern industrial America and its emergence as a world power.

205 **HISTORY OF SPORTS IN AMERICAN SOCIETY** (3) Topics covered include the evolution of major sports, the influence of organization and technology, critics of sports, racism, the Nazi Olympics, a comparison with sports in other countries, the

role of women and labor relations within sports, sports in the school, and the lives and times of various sports heroes.

210 **HERSTORY: THE AMERICAN SIDE OF WOMEN'S PAST** (3) A survey of life stories, experiences, and thoughts of American women 1607-1973. The course treats such themes as the changing expectations of women and men in society, women in the labor force, and the equal rights movement.

232 **AZTECS, INCAS, MAYAS** (3) A study of the achievements, values, and organization of three Indian societies before the arrival of Columbus. Classes will discuss a number of multi-disciplinary topics including the nature of societal evolution, the implication of a non-monetary economy, the benefits of alternative systems of government and justice, the purpose of polytheistic religions, and the reasons for the decline of a civilization.

240 **MAKERS OF HISTORY** (1-3) The study of history through biography with an emphasis on historical figures who have influenced the course of events as well as on how events have shaped the lives of the makers of history. Some examples are Hitler, Stalin, Churchill, Erasmus, Luther, St. Ignatius, Ghandi, Mao, Ho Chi Minh.

250 **EAST EUROPEAN HISTORY** (3) A survey of East European cultures, peoples, and states, with emphasis on the rise and development of national consciousness (1800-1950) among the East Europeans.

260 **HISTORY OF CRIMINAL JUSTICE** (3) The evolution of crime and criminal justice systems in the ancient world, England, and, primarily, the United States.

288 **EASTERN RELIGIONS** (3) An overall view of the major religions of Asia — Islam, Buddhism, Hinduism, and Confucianism. An analysis of the basic beliefs and duties of these religions and the effect of these religions on Asian culture.

295 **TOPICS IN HISTORY** (1-3) This course is designed for lower division students, majors and non-majors, who desire a course in a special area that is of current interest. Various topics will be offered each semester.

300 **HISTORIOGRAPHY** (3) This course introduces the student to the discipline, methods, and techniques of historical research and writing and also the major interpretations of history and historiographical writings. Required of all History majors in the junior year.

301 **HISTORY OF COLONIAL AMERICA TO 1788** (3) A study of the exploration and settlement of North America with special emphasis on the 13 English colonies. The various political, social and economic developments in the American colonies to 1788 will be examined.

302 **CONSTITUTION TO MANIFEST DESTINY (1789-1850)** (3) This course will give particular emphasis to the movement for American independence and events during the Revolutionary War and early national period. Some topics are Age of Jackson, Reform Movements and Political Parties.

304 **HISTORY OF THE CIVIL WAR AND RECONSTRUCTION** (3) The background of the sectional controversy; constitutional issues, secession and military conflict; the aftermath of the war, North and South, with particular emphasis on political development in the period of reconstruction ending in 1877.

306 **AMERICA BETWEEN THE WARS** (3) American politics, diplomacy and society in World War I, the nervous Twenties, the Depression Decade, and World War II.

307 **CONTEMPORARY AMERICA** (3) American political, diplomatic and social developments in the Atomic Era. Watergate, Vietnam and Civil Rights are key points studied.

310 **BLACK MAN IN WHITE AMERICA** (3) Topical foci include African heritage, Atlantic slave trade, American slavery, Civil War and Reconstruction, segregation and disfranchisement, the Harlem Renaissance, and Black Revolution. Thematic emphases center upon the black resistance and the quest for a black identity.

315 **HISTORY OF SOCIAL WELFARE IN AMERICA** (3) This course will examine the development of the public welfare systems as a mirror reflecting Americans' changing attitudes toward misfortune and relief. Thematic emphasis will center upon a central issue of historical evaluation and contemporary policy: the appropriate balance between assistance-security and work-independence objectives in public welfare efforts to relieve misfortune.

340 **THE ANCIENT WORLD** (3) A study of the ancient world dealing with the growth and development of cultural, social and intellectual foundations that formed the basis of our present institutions. The development of classical life and thought will be analyzed through a study of the great civilizations of Greece and Rome.

345 **MIDDLE AGES: LIFE AND STYLE** (3) The political, socio-economic and cultural development of the civilization of Medieval Europe from the fall of Rome to the Medieval synthesis in the High Middle Ages.

346 **RENAISSANCE AND REFORMATION** (3) An examination of the political, social, economic and cultural forces involved in the transition from Medieval western society with particular attention to the rise of national states and the growth of individualism. The Reformation as a catalyst for change is highlighted.

351 **RISE OF MODERN ENGLAND** (3) A survey of the social, political, economic and constitutional themes that have shaped modern England since 1688.

359 **RUSSIA: BEGINNING TO 1917** (3) After considering the basic problems in Russian historiography, the course will deal with the nature and development of the Russian Empire from the time of Peter I to the Revolution of 1917. Comparing the development of Russia with that of other states and an examination of the essential roots underlying the modern Soviet state will also be essential to this course.

361 **BEGINNINGS OF MODERN EUROPE** (3) The emergence of European states in the sixteenth, seventeenth, and eighteenth centuries with a focus on domestic and international developments.

364/365 **EUROPE IN THE TWENTIETH CENTURY** (3) A study of political, economic and cultural developments in Europe in the twentieth century with particular attention given to the factors involved in the two World Wars and their global impact and significance. First semester, 1914-1939, second semester, World War II and its aftermath.

375 **COLONIAL LATIN AMERICA** (3) A discussion of the colonial era focusing on Pre-Columbian civilizations, the conquerors, the creation of Spanish and Portuguese institutions for mastery of a multi-racial society, the reforms of the 18th century and the independence struggles.

376 **MODERN LATIN AMERICA** (3) A survey of the modern period emphasizing the difficulty in creating a national self-identity, the impact of liberal and conservative philosophies on the 19th century, and the viability of revolutionary vs. non-revolutionary approaches to the problems of 20th century Latin America.

385 **HISTORY OF THE MIDDLE EAST** (3) The major political, economic and cultural features of the Middle East with particular emphasis on modern colonialism in the area, Zionism, and the Arab States' contemporary relations with other nations of the world.

386 **HISTORY OF SOUTHEAST ASIA** (3) A survey of the histories of peoples and states of Southeast Asia, Burma, Thailand, Cambodia, Laos, Vietnam, Malaysia, Indonesia, and the Philippines. The course covers the history of Southeast Asia from the Portuguese impact in the 16th century to the influence of the United States in the 20th century. Southeast Asia is examined in the age of imperialism, colonialism, nationalism, and independence.

387 **HISTORY OF THE FAR EAST** (3) A study of the traditional cultures and institutions of China and its role in Korea and Southeast Asia; the role of Western powers in China's development; post-war changes; United States foreign policy in relation to the Far East; and the emergence of Communist China.

401 **HISTORY OF PENNSYLVANIA** (3) A study of the founding and development of Pennsylvania, emphasizing the social, political, and economic characteristics of the Commonwealth; the diversity of its people; the state's contributions to the rest of the nation. Local and family history is an important aspect.

406 **THE WESTWARD MOVEMENT IN AMERICA** (3) A discussion of the settlement of the various geographic areas comprising the United States and the influence of westward expansions on the political, social and economic development of the American people. Deals with the trans-Mississippi West and role of the Plains Indian in American History.

420 **THE TEACHING OF HISTORY IN THE SECONDARY SCHOOLS** (3) Each Student in this course will be involved in the creation of a teaching unit in history directly transferable to the secondary teaching situation. He will be required to research and organize content material utilized within each unit and develop appropriate teaching approaches to facilitate instruction. Topics such as warfare, diplomacy, modern revolution, the role of women, economics, minority groups, politics, and other areas appropriate for study in secondary units or mini-courses will be developed on an historical-comparative approach to enable students to see trends and make comparisons.

430 **THE AMERICAN INDIAN: FROM BERING TO RED POWER** (3) This course deals with the origins, culture and history of the American Indian. The development of Indian policy by colonial rulers as well as the United States will be studied and compared. Problems of assimilation and cultural conflict resulting from removal as well as modern Indian problems will be discussed in detail.

444 **INTRODUCTION TO HISTORICAL MUSEUMS, PRESERVATION AND SOCIETIES** (3) This course is designed to provide a broad background regarding museum work, historical societies and their function, and historical preservation. This course will help prepare students for internships and potential careers in the field of museology and preservation.

450 **HISTORY INTERNSHIP** (3-12) The history internship is designed to provide pre-professional skills to interested history majors and, under special circumstances, to non-majors as well. Museum and archival work are examples of areas in which students can bring together academic training and practical experience. As a prerequisite the student needs the consent of a sponsoring member of the history department, the chairman, and an agency.

451 **FRANCE: FROM THE REVOLUTION TO THE PRESENT** (3) A survey of the social, political, economic and constitutional themes that have shaped modern France since 1789.

454 **MODERN GERMANY** (3) A consideration of the forces of German unity since the rise of Brandenburg-Prussia with emphasis on the influence of Frederick the Great, the Bismarckian accomplishment of 1870 and Imperial, Weimar and Nazi Germany.

458 THE SOVIET UNION (3) A history of the Bolshevik Revolution and the founding of the Soviet Union: emphasis is on the internal and external factors involved in world Communism and Soviet power politics.

470 HISTORY OF MEXICO (3) A survey of Mexican history from pre-Columbian civilizations to the present. Particular attention will be given to the interaction of various racial groups, the formation of a distinct Mexican national identity and class conflicts.

496 SEMINARS ON SELECTED TOPICS (3) Open to history majors in the senior year. This course will provide the student with in-depth knowledge of historical methodology and research. Significant historical problems in history are selected for oral discussion.

497 INDEPENDENT STUDY (1-3) Independent study is an activity initiated by the student to increase his/her already advanced knowledge in a particular academic discipline. The subject is examined in an intensive manner with guidance by a faculty member who has special expertise in that subject.

HOME ECONOMICS (HEC)

100 HOME ECONOMICS ORIENTATION (1) Survey of home economics philosophy and professional orientation. Emphasizes historical and sociological development of the family as the central theme of home economics.

101 CLOTHING AND MAN (3) An exploration of clothing selection based upon art principles, the fashion clothing industry, the social psychological implications of clothing for the consumer, textiles, and laws and trade regulations relating to clothing and textiles.

102 FUNDAMENTALS OF FASHION (2) Art principles related to fashion and to fashion trends. A study of design in couture and ready-to-wear clothing. An indepth analysis of figure types. Prerequisite: HEc 101.

111 NUTRITIONAL ECOLOGY OF MAN (3) A study of the psychological, cultural, sociological and economic aspects of food with national and world implications. A study of the principles of nutrition and basic food groups with assessment of the students' dietary habits.

121 PERSONAL AND FAMILY MANAGEMENT (2) An introductory course focusing upon techniques of personal and family management. The course emphasizes management of individual and family resources as related to human needs, values, and goals. Experiences will be provided and exploration made of decision-making as influenced by such factors as family life cycle, life styles, man-woman roles, socio-economics variations, and aspirations of individual and family members. Management and conservation of time, energy, income, community, and environmental resources will be analyzed.

131 INTRODUCTION TO CHILD AND FAMILY (2) An introduction to the subject matter pertaining to the relationships involved in human development throughout the life cycle with emphasis on family influences.

201 FUNDAMENTALS OF CLOTHING CONSTRUCTION (3) An introduction to pattern and fabric selection, to the variety of construction techniques, and to the methods of fitting garments. Directed laboratory experience provides an opportunity to solve individual clothing problems through the application of principles. 1 Lect., 4 Lab.

210 SOCIAL USAGE (1) A survey of contemporary influences on accepted standards of conduct in professional and social situations.

211-9 **FUNDAMENTALS OF NUTRITION** (3) A study of the food nutrients and their utilization by the body in relation to total health of persons of all ages. The influence of socio-economic factors and availability of food as they affect the nutritional status of people throughout this nation and the world.

215 **PRINCIPLES OF FOOD** (3) The application of physical and chemical principles as related to the selection, preparation, and preservation of food. 1 Lect., 4 Lab.

216 **FOOD FOR THE FAMILY** (3) Consumer education concerning food production, marketing and purchasing. Meal-time management including planning, preparation and service of meals. Prerequisites: HEc 111 and 215 or permission of the instructor. 1 Lect., 4 Lab.

224 **HOUSEHOLD EQUIPMENT** (2) Selection, use, care and testing of household appliances and equipment. Development of an awareness of criteria for evaluating equipment for wise selection. 1 Lect., 2 Lab.

231 **THE FIRST YEARS OF CHILDHOOD** (3) An overview of the child from conception to age five; practical experience in determining and understanding the parent and teacher in facilitating optimal development of the very young child. Observation of and participation with the children in the Early Childhood Education Center. Prerequisites: Psy. 101, HEc 131; or by permission of the instructor. 2 Lect., 2 Lab.

232 **THE AMERICAN FAMILY** (3) A study of the American Family throughout the life cycle including a brief historical overview of the family in the western world; emphasizes contemporary families, their life styles, values, and contingent standards; analyzes aspects of family life and culture across generations through a basic genealogical study. Utilizes current research findings.

301 **INTERMEDIATE CLOTHING** (3) A further study of construction skills and techniques as these relate to fabrics. Special consideration is given to fitting garments. Tailoring techniques are introduced. This course may not be scheduled after HEc 303, HEc 403, or HEc 404. 1 Lect., 4 Lab.

302 **APPAREL DESIGN ANALYSIS** (3) Opportunity is provided for the analysis of the concepts and principles of design and color as applied to apparel. Includes analysis of designs and the interrelationships of aesthetic principles, function, materials, and technical procedures. Prerequisite: HEc 102.

303 **TAILORING** (3) The major emphasis is placed on the difference between custom and speed tailoring, and the selection of tailoring fabrics and their relationship to design. Tailoring construction techniques are related to individual problems. Prerequisite: HEc 201. 1 Lect., 4 Lab.

304 **CLOTHING PRODUCTION, DISTRIBUTION AND CONSUMPTION** (3) A study of the clothing field as an economic force. Analysis of fashion trends and their effect on production and distribution in manufacturing as these affect the consumer. Prerequisite: None for Consumer Service Majors in the Clothing and Textile Option; available to other students by consent of instructor.

305 **STRUCTURES AND PROPERTIES OF FIBERS** (2) The study of the chemical and physical structures of fibers and the resulting properties. Prerequisite: Chem. 102.

315 **FOOD SERVICE ORGANIZATION AND MANAGEMENT** (3) Organizing, planning, directing and controlling of food services in public and private institutions. Practical methods, procedures and techniques used in dealing effectively with personnel. Class sessions will include lectures, required readings, discussions, case analyses, projects, simulation activities and guest speakers. Prerequisites: Junior status: HEc 111, 215, 216 or permission of instructor.

317 **NUTRITION THROUGHOUT THE LIFE CYCLE** (3) Nutritional requirements of an individual from conception through the later stages of the life cycle. Included is the study of adequate nutrition for all ages and for related changes in nutritional needs as a result of advancing age and that of related common health problems.

321 **CONSUMER ECONOMICS** (3) An introductory look at the consumer's role in American society. The focus of the course is on individual decision-making and the knowledge necessary for best achieving satisfaction based on personal goals and value system. The major emphasis of the course is on consumer rights: the right to be informed, the right to choice, the right to safety and the right to be heard. In addition to an overview of the realities of the marketplace and avenues for consumer protection, the course features tactics and techniques for consumer survival.

323 **INTERIOR ENVIRONMENT** (3) The student has the opportunity to develop knowledge and skills in the areas of interior design and planning. Content includes study of functional and personality needs as related to design, furnishings, materials and elements of the interior. Each student will relate course content to his/her professional goals through skill projects. 2 Lect., 2 Lab.

330 **CHILD AND FAMILY AGENCIES** (3) A lecture-seminar course to familiarize the student with the various agencies, both public and private, that serve the child and the family. A one-day selected observation experience is required. Prerequisites: HEc 131, 231, 232 or by permission of instructor. 1 Lect., 1 Rect., 2 Lab.

332 **THE ADOLESCENT** (3) A study of adolescents and their development in relation to self, family, education and the social order, with emphasis on their characteristics and needs; examination of issues affecting the adolescent.

333 **PARENT/CHILD STUDY** (3) A study of current programs and research findings concerning the factors in the early environment of the child which determine the direction of and facility for learning. Includes observations of infants, toddlers, and pre-schoolers. Opportunity for case study. Prerequisites: HEc 231, 232; or by permission of instructor. 2 Lect., 2 Lab.

334 **ISSUES IN CONTEMPORARY FAMILY LIFE** (3) Provides for an in-depth study of one or more issues the student will wish to explore following a broad presentation of those issues that are perennial, and those that are current for families and their members. Prerequisites: Psy. 101, HEc 131; or by permission of instructor.

335 **PLAY AND CREATIVE ACTIVITIES IN CHILDHOOD** (3) In-depth emphasis on the contributions of play and creative activities in physical, emotional, social, and intellectual development. Includes initial observation and interpretation of the child's behavior in a controlled situation; opportunity to exercise ingenuity to devise play and creative activities in a variety of play and role playing situations. Seminars to discuss observation and participation. Prerequisites: HEc 231, 232; or by permission of instructor. 1 Lect., 1 Recit., 2 Lab.

336 **ADULTHOOD AND AGING** (3) This course serves as an introductory study of the adult from the end of adolescence until death. Emphasis is on normal aging and potential stresses associated with the aging process. Consideration is given to aging within the family and the larger social context. Services to the elderly and governmental programs are also studied. An opportunity for participation with individuals and groups is provided.

390 **OBSERVATION AND PARTICIPATION IN EDUCATIONAL SETTINGS** (3) The prospective teacher applies concepts and techniques taught in HEc 391 while observing and participating in a variety of teaching-learning situations. The student develops a perspective about the total educational process through contact with a variety of educational settings including child development centers, day care

centers, all levels of public school, vocational schools, Home Economics Extension and 4-H programs, programs for the elderly, and services for people with special needs. Characteristics of different learners are explored in terms of age and developmental levels, family settings, socio-economics, cultural, and racial background, sex, special abilities, and interests. Prerequisite: HEc 391, or by permission of the instructor. 2 Lect., 2 Lab.

391 **TEACHING OF HOME ECONOMICS I** (3) This is the first course in the home economics education sequence, the primary focus of which is the planning for the teaching of home economics content areas such as: nutrition, consumer decision-making, housing, human development and family relationships, meal management, self-understanding, clothing and textiles, personal and family management. Opportunity is provided for exploration of home economics education resource materials. Simulation and micro-teaching are utilized for the implementation of the components of daily lesson planning.

392 **TEACHING OF HOME ECONOMICS II** (3) Emphasizes program and curriculum development for home economics education at various levels, including selection of learning experiences and resource materials related to objectives, generalizations, concepts and evaluation. Provides opportunity to apply management principles to the teaching task. Special attention given to current legislation and issues impacting on the family relative to the teaching of home economics. Prerequisites: HEc 390 and 391.

403 **FLAT PATTERN DESIGN** (3) Flat pattern methods are used to develop the ability to create new patterns, alter commercial patterns, apply principles of fitting, and to appreciate the fundamental use of grain. Prerequisite: HEc 201. 1 Lect., 4 Lab.

404 **CREATIVE DRAPING** (3) Draping methods are used in the creation of designs for individual construction using basic techniques, variations in basic designs, original ideas and expression of one's designs. Prerequisite: HEc 201. 1 Lect., 4 Lab.

405 **FABRICS AND FINISHES** (3) Relationship of fiber structure, fabric structure and finishing processes to fabric performance. Laboratory evaluation of performance characteristics of textile products. Prerequisite: HEc 305. 2 Lect., 2 Lab.

409 **SEMINAR AND FIELD EXPERIENCE IN CLOTHING** (4) An approved off campus experience in a cooperative program with business establishments which merchandise textiles or apparel. The study of merchandising, interview procedure, job opportunities in the field. Prerequisites: HEc 302, 303, 304; or by permission of instructor. 1 Lect., 6 Lab.

410 **DIET THERAPY** (3) The study of adaptation of normal diet to meet the altered body needs for nutrients caused by diseased or abnormal metabolic patterns in humans.

416 **PRESENTATION TECHNIQUES IN HOME ECONOMICS** (2) Basic principles and techniques of presentation for the home economist in business. Presentations by students and evaluation of educational effectiveness of other students' and professional presentations. Use of a variety of audio-visual media. Prerequisite: junior standing. 4 Lab.

417 **SURVEY OF NUTRITION** (3) Chemistry of nutrients, metabolism, and normal nutrition needs at various stages of the life cycle. Laboratory work related to food consumption and effects of various types of preparation upon ultimate nutrient supply. Current research, food fads and fallacies and consumer protection highlighted. Prerequisites: Eight semester hours in chemistry, three semester hours in foods, HEc 111. 2 Lect., 2 Lab.

418 **ADVANCED FOODS** (3) An extension of the principles of food preparation, incorporating an experimental approach to preparation problems. The selection and

service of food for different occasions, considering the aesthetic, cultural and social significance of food. Prerequisites: HEc 215 and 216. 1 Lect., 4 Lab.

419 **FIELD EXPERIENCE IN FOODS** (3) An approved practicum in the students' major area of interest in the field of food service. The students will present to the college supervisor a written summation of the learning experiences and knowledge gained as an outcome of the specific practicum. Prerequisites: HEc 111, 215, 216; junior standing or by permission of instructor. 6 Lab.

421 **HOUSEHOLD EQUIPMENT AND HOME MANAGEMENT** (3) This course is an in-depth study of theories and processes crucial to management of the home with application through laboratory experiences. Household equipment is studied and used in laboratory situations. Conservation of resources is considered. 2 Lect., 2 Lab.

423 **INTERIOR DESIGN IN THE HOME** (3) Subject matter is drawn from the study of interior design. Upon completion of the course the student will be able to create a basic interior coordinating design materials and accessories, valuing the interrelationship of environment and personal taste and personality. Laboratory experience includes the professional procedure of presenting plans to clients with perspective drawings, fabric and color collage, and floor plans. Available to all home economics majors. 2 Lect., 2 Lab.

424 **THE HANDICAPPED HOMEMAKER** (3) Students are made aware of the many problems faced by homemakers with physical handicaps such as arthritis, amputation, poor sight or blindness, limited mobility, etc. They research these conditions and simulate handicaps in order to experience some of the difficulties that arise, and study ways of coping with the disability. This will enable the students to aid persons with physical limitations to achieve more independent living.

425 **PERSONAL AND FAMILY FINANCIAL MANAGEMENT** (3) A course covering financial planning for individuals and families over a lifetime which includes money management techniques useful in accomplishing one's personal and family financial goals. Designed in three parts, the course includes: (1) Financial Planning for Daily Living: goal setting, savings, taxes and borrowing, (2) Risk and the Need for Insurance, (3) Investing for Present and Future: Investment and Retirement Planning. Prerequisite: HEc 321 or consent of instructor.

429 **FIELD EXPERIENCE IN FOOD AND EQUIPMENT** (3) An approved practicum in the students' major area of interest in the field of consumer service. The students will present to the college supervisor a written summation of the learning experiences and knowledge gained as an outcome of the specific practicum. Prerequisites: HEc 111, 215, and 216; junior standing or by permission of instructor. 6 Lab.

435 **TEACHING IN THE PRESCHOOL** (3) Participation in selected preschool milieux with provision for practicing principles of management of preschool groups. Provides for activities in art, music, literature, science, mathematics, and language experiences. Includes a weekly seminar for discussion of participation, principles of preschool management, and involvement of parents. Prerequisites: HEc 231, 232, 333, and 335, or concurrent with HEc 333 and HEc 335. Others upon permission of the instructor. 1 Recit., 4 Lab.

436 **PRE-PROFESSIONAL SEMINAR** (2) The first half of the course is devoted to a study of the various agencies of both the public and private sector of communities and the opportunity to explore areas of responsibility and worth of agency in varying political divisions. Opportunity is provided for separate studies and individualized instruction in the latter half of the course. Prerequisites: Soc. 111, HEc 232, 330, or by permission of the instructor. 1 Lect., 2 Lab.

437 **ADVANCED CHILD DEVELOPMENT** (3) Advanced study in child development with emphasis on current research and readings dealing with children. Prerequisite: HEc 131.

438 **ADVANCED FAMILY RELATIONS** (3) Individual study program combined with class seminar providing in-depth research and exploration of selected areas pertinent to a better understanding of the problems confronting today's families. Field trips as well as resource people are a part of this advanced study. 2 Lect., 1 Recit.

439 **PROFESSIONAL SEMESTER — CHILD AND FAMILY SERVICE** (12) Pre-professional field experience for majors in the Child and Family Service Program. To be taken the last semester, the course consists of four parts. One week of observation in selected agency; two weeks of supervised and individual consultations in preparation for assuming participatory role. Nine weeks supervised participation as a pre-professional member of an approved agency; three weeks professional seminar consisting of evaluation and such additional experiences as are needed to complete the program for entry level within the chosen professional field.

491 **CURRICULUM DEVELOPMENT IN HOME ECONOMICS** (3) Emphasis on principles of curriculum planning with opportunity to develop individual projects for specific programs and specific groups of students. Prerequisites: HEc 390, 391, 392, and Ed. 400, or by permission of the instructor.

495 **VOCATIONAL AND CAREER EDUCATION** (3) Course begins with values relative to work and leisure. Traces the implications of federal vocational education legislation as it relates to home economics. Emphasizes planning for implementation of home economics related occupational programs.

497 **INDEPENDENT STUDY** (See page 32 for course description.)

ID 201 **ENGLAND STUDY TOUR** (3) (See course description below.)

ID 285 **MODULE A: MAINSTREAMING** (1) (See course description below.)

ID 285 **MODULE B: READING** (1) See next page for course description.)

ID 285 **MODULE C: GIFTED CHILDREN** (1) (See next page for course description.)

ID 499 **INTERDISCIPLINARY SEMINAR IN EARLY CHILDHOOD EDUCATION** (See next page for course description.)

INTERDISCIPLINARY STUDIES (ID)

201 **INTERDISCIPLINARY STUDIES** (3) Topics to be offered will vary. Studies involving more than one department or discipline shall be offered; course may be applied to meet the five areas of the general education requirements, and with departmental approval may be applied to the major. Specific topics will be announced each semester prior to registration; consult such announcements for meeting hours, prerequisites, and other details.

201 **ENGLAND STUDY TOUR** (3) Opportunity to travel in Great Britain and live with families. Proposed programs and homestays to promote understanding, tolerance, and respect arranged through Council for International Contact, London. Interdisciplinary seminar course open to all matriculating students as well as area residents. Social Science, or Home Economics elective credit.

285 **MODULE A: MAINSTREAMING** (1) A multi-disciplinary approach designed to assist pre-professionals in understanding mentally and/or physically handicapped individuals with emphasis on the various provisions for their education with the least restrictive environment being the major orientation.

285 **MODULE B: READING** (1-3) This module is designed to introduce pre-professionals to the understanding of the reading process. This introduction will guide them to select and use the most appropriate reading methods and materials adaptable to meet individual student needs in secondary classrooms. Prerequisite: approval of department chairperson.

285 **MODULE C: GIFTED CHILDREN** (1) A multi-disciplinary orientation concentrating emphasis on identification, characteristics, and programming for the gifted child.

499 **INTERDISCIPLINARY SEMINAR IN EARLY CHILDHOOD EDUCATION** (2) Inter-disciplinary study of issues, problems, literature, and research base for early childhood education programs. Focus will be on principles and practical procedures for delivery of effective early childhood education in a variety of settings in Elementary Education, Home Economics and Special Education.

ITALIAN (IT)

101 **INTRODUCTORY ITALIAN I** (3) For students who have not previously studied Italian. Fundamentals of grammar, drill in pronunciation, listening comprehension and speaking. Language lab attendance required twice a week. 3 Lect., 2 Lab.

102 **INTRODUCTORY ITALIAN II** (3) Continuation of Italian 101. Prerequisite: Italian 101 or equivalent competence. Fundamentals of grammar, drill in pronunciation, listening comprehension and speaking. Language lab attendance required twice a week. 3 Lect., 2 Lab.

JOURNALISM (JOUR)

100 **JOURNALISM** (3) Fundamentals of reporting, editing, and writing feature articles. Emphasis on news gathering, news evaluation, and style and structures of news stories.

200 **CRISIS REPORTING** (3) Critical examination of the way major current issues are handled by the various media. Practice in writing, investigating and interviewing. Prerequisite: JOUR 100.

210 **MEDIA DESIGN** (3) A study of the principles of newspapers, magazine, book, and television design. Practice in designing pages for the print media and in writing copy for programs for the electronic media. The course will ordinarily center upon a few particular themes as they are adapted for presentation by each medium. These themes will include such contemporary issues as the Watergate investigation, summer and winter olympics, etc. Prerequisite: JOUR 100.

249 **CRIMINAL JUSTICE AND THE PRESS** (3) Instruction in reporting police news. Emphasis will be given to the examination and evaluation of the contrasting viewpoints of reporters, law enforcement officials, and the accused in the development and content of news stories. Prerequisites: CJA 100; PSCI 101.

310 **INTERPRETATIVE JOURNALISM** (3) An examination of the content, style, and techniques of contemporary interpretative news reporting in various magazines and newspapers. Attention to bias, libel, propaganda, ethics, and editorial columns. Practice in writing interpretative articles. Prerequisite: JOUR 100.

320 **CREATIVE JOURNALISM** (3) An introduction to the theory and practice of the New Journalism. Students will explore the culture and resource of the region, gathering materials for publishable articles. Prerequisite: JOUR 100.

330 **PRESS PERFORMANCE** (3) An evaluation of the role of the contemporary American press in a modern democracy. Such problems as violence, sensationalism, and political bias will be investigated. Prerequisite: JOUR 100.

495 **JOURNALISM INTERNSHIP** (1-12) An "internship" of work with local newspaper. Practice working on a publication, with attention given to the student's journalistic interest (news reporting, photography, editing) and the major aspects of production. Prerequisite: JOUR 100.

MATHEMATICS (MA)

090 **GENERAL MATHEMATICS** (3) Introduction to standard topics in arithmetic and basic algebra, including whole numbers, signed numbers, fractions, radicals, decimals, percents, solving equations, graphing, sets, exponents, inequalities, formulas, functions, and word problems. Problem solving will be stressed. Course does not count toward total credits needed for graduation.

101 **FUNDAMENTAL CONCEPTS IN MATHEMATICS** (3) A survey of the basic modern ideas in mathematics, including sets, sets of numbers, properties of numbers, the field concept, relations, functions, graphs, and equations.

105 **INTRODUCTORY STATISTICS** (3) A survey of basic statistical methods for analyzing data. Topics include descriptive statistics, probability, sampling, point and interval estimation, hypothesis tests, linear regression, correlation, and non-parametric tests. Laboratory, South Hall, Room 218.

107 **INTRODUCTION TO COMPUTER PROGRAMMING** (3) Fundamentals for FORTRAN programming applied to the UNIVAC SERIES 70 computer. Use of FORTRAN language to solve practical problems pertinent to science, business, and other disciplines. Laboratory includes use of a key punch and the UNIVAC SERIES 70 computer.

109 **FINITE MATHEMATICS** (3) An initial treatment of those topics in basic mathematics that are of special importance in the social and natural sciences. Topics included are logic, sets, and counting techniques, probability, mathematical models, linear equations and inequalities, introduction to linear programming, matrices, Markov chains, and game theory. Prerequisite: Two years of college-preparatory high school mathematics or MA 130.

111 **FUNDAMENTAL CONCEPTS OF CALCULUS** (3) A one semester course in the fundamental concepts of calculus for non-physical science majors utilizing the basic techniques of differential and integral calculus. This course is not available for students who have completed MA 140.

120 **MATHEMATICS OF FINANCE** (3) An introduction to topics in mathematics that relate directly to the business world, interest, discount, compound interest, annuities, amortization, sinking funds, bonds, depreciation, capitalization, perpetuities. Prerequisite: One year of high school algebra.

125 **MATHEMATICS FOR THE HEALTH SCIENCES** (3) This course is designed to meet the needs of the programs in X-ray Technology and Respiratory Therapy at Robert Packer Hospital. The material covered includes elementary algebra, numerical trigonometry, a description of the system of real numbers and numeration systems.

130 **ALGEBRA AND TRIGONOMETRY** (3) Algebraic equations and inequalities, functions and graphs, polynomial functions, trigonometric functions and formulas, and exponential and logarithmic functions.

140 ANALYTIC GEOMETRY AND CALCULUS I (3) The rate of change of a function, limits, derivatives of algebraic functions, applications and integration. Prerequisite: MA 130 or equivalent.

141 ANALYTIC GEOMETRY AND CALCULUS II (3) Application of the definite integral, transcendental functions, hyperbolic functions, methods of integration and plane analytic geometry. Prerequisite: MA 140.

160 INTRODUCTION TO APPLIED MATHEMATICS (3) Basic concepts of applications and approximations of the ideas of limit, continuity, and differentiability. Also, the standard concepts in applied mathematics such as error analysis, polynomial interpolation, and solution of linear and non-linear equations. FORTRAN IV will be introduced as an aid to investigating these areas. Prerequisite: MA 140.

203 TOPICS IN ALGEBRA AND GEOMETRY (3) A study of the basic ideas and structure in modern algebra and geometry, including groups, fields, relations, graphs, congruences, and measurement. Prerequisite: MA 101 or permission of instructor.

205 STATISTICS II (3) This is a second course in statistics designed for students in business or the social sciences. Topics include multiple correlation, analysis of variance, time series analysis, non-parametric methods, index numbers and use of a computer software package (SPSS) in statistical computations.

240 ANALYTIC GEOMETRY AND CALCULUS III (3) Plane analytic geometry, polar coordinates, polar equations, plane areas in polar coordinates, parametric equations and vectors, quadric surfaces and vector functions and their derivatives. Prerequisite: MA 141.

241 ANALYTIC GEOMETRY AND CALCULUS IV (3) Partial differentiation with applications, multiple integrals with applications, cylindrical and spherical coordinates, infinite series, power series, indeterminate forms, complex numbers and functions. Prerequisite: MA 240.

260 DISCRETE STRUCTURES (3) Foundations of mathematics, emphasizing fundamental concepts in abstract mathematics and deductive reasoning. Topics will include logic, Boolean algebra, sets, functions, relations, cardinality, number systems, abstract systems and algorithms. Prerequisite: MA 140.

280 LINEAR ALGEBRA AND MATRIX THEORY (3) An introductory study of geometric vectors and their basic properties in dimensions two and three and of matrices and their use in the theory of systems of equations. Emphasis will be placed on real vector spaces. Topics to be included are: geometry of vectors, matrix algebra and operations, solutions of general systems of linear equations, inversion of matrices, determinants, vectors and vector spaces, subspaces, linear independence, basic and dimension, linear transformations, characteristic roots and vectors and applications. Prerequisite: MA 141.

300 (ED) TEACHING MATHEMATICS IN THE SECONDARY SCHOOL (3) Consideration of the place and purpose of mathematics in secondary education; examination of curriculum problems; study of methods, techniques, and psychology in the teaching of algebra and geometry. Interpretation of the recommendations of the School Mathematics Study Group and similar committees. Prerequisite: MA 329 or 361 or concurrently.

304 HISTORY AND PHILOSOPHY OF MATHEMATICS (3) A study of the chronological development of facets of mathematics that have contemporary importance. The historical and philosophical background of each facet is integrated with experience in mathematical study and application. Emphasis is placed on great contributors of mathematics, their contributions, and their methods of reasoning. Prerequisite: MA 260.

310 **NUMERICAL ANALYSIS** (3) A study of numerical methods for the solution of algebraic, transcendental and differential equations, numerical integration and differentiation, and error analysis. Prerequisite: MA 107, 160 or 240.

311 **DIFFERENTIAL EQUATIONS I** (3) Ordinary differential equations, exact equations, integrating factors, differential equations of the first order and first degree, differential equations of the first order and degree higher than first, homogeneous linear differential equations with constant coefficients and applications. Laplace transforms and existence theorems. Prerequisite: MA 141.

312 **DIFFERENTIAL EQUATIONS II** (3) Series solutions to ordinary differential equations, solutions of partial differential equations and boundary value problems. Laplace transforms, and Fourier series. Prerequisite: MA 311.

313 **APPLIED PROBABILITY AND STATISTICS** (3) An introduction to applications of descriptive and inferential statistics and probability. Frequency distributions, measures of location and variation, probability, expected value, and decision making, probability distributions, sampling and sampling distributions, inferences concerning means, standard deviations, and proportions, analysis of variance, non-parametric methods, regression, correlation, planning surveys and experiments. Prerequisite: MA 140.

480 (CIS 480) **OPERATIONS RESEARCH** (3) The development and use of the techniques of operations research. Topics include linear programming, queuing theory, probabilistic inventory models, and simulation. Prerequisites: MA 160 and 280, or permission of instructor.

324 **APPLIED MATHEMATICS** (3) A course to illustrate the principles and basic styles of thought in solving physical problems by mathematical methods. Particle dynamics, heat and fluid flow, wave equations, vector, Fourier and tensor analysis. Prerequisites: MA 240 and 280 or by permission of instructor.

329 **MODERN GEOMETRY I** (3) An introduction to the foundations of geometry with emphasis on the axiomatic development of the Euclidean system. Prerequisite: MA 260.

330 **MODERN GEOMETRY II** (3) The foundations of geometry with emphasis on non-Euclidean axiomatic structures. Prerequisite: MA 329 or by permission of instructor.

335 **NUMBER THEORY** (3) An analytical study of basic concepts including divisibility, congruence, quadratic reciprocity and Diophantine equations. Varied methods of proof are stressed. Prerequisites: MA 141 and 260.

345 **REAL ANALYSIS I** (3) The real number system. Emphasis on the concepts and theoretical approach to calculus: functions, sequences, series, limits, continuity, derivatives, the Riemann integrals and sequences of functions. Prerequisites: MA 241 and 260.

346 **REAL ANALYSIS II** (3) A continuation of MA 345. Prerequisite: MA 345.

348 **COMPLEX VARIABLES** (3) A first course in complex variables. Complex numbers, analytic functions, elementary functions, mappings by elementary functions, integrals, power series, residues, poles, conformal mappings. Prerequisite: MA 241.

361 **MODERN ALGEBRA I** (3) Sets, rings, integral domains, fields, groups, polynomials, congruences, algebra or classes, mappings, homomorphisms and isomorphisms. Prerequisite: MA 260 or permission of instructor.

362 **MODERN ALGEBRA II** (3) A continuation of 361 consisting of a more detailed study of groups, rings, ideals, fields, and selected topics. Prerequisite: MA 361.

371 MATHEMATICAL STATISTICS I (3) Distributions of discrete and continuous random variables, expected values and moments, conditional probability and independence, special discrete and continuous distributions. Prerequisite: MA 241 or concurrent enrollment.

372 MATHEMATICAL STATISTICS II (3) Interval estimation, order statistics, point estimation, tests of hypotheses. Prerequisite: MA 371.

381 TOPOLOGY (3) An introductory course in point-set topology. Set theory, metric spaces, topological spaces, connectedness and compactness. Prerequisites: MA 141 and 260.

401 SELECTED TOPICS IN MATHEMATICS (3) Selections from topology, Algebra, Real Analysis, Matrix Theory, Computer Science or other junior or senior level topics. Active participation by the student is required. Prerequisite: Permission of instructor.

402 SEMINAR IN MATHEMATICS (3) Papers from the American Mathematical Monthly, comparable journals and various advanced references will be presented and discussed by the students. Continuous reading and participation will be required. Prerequisite: Permission of instructor.

450 MATHEMATICS INTERNSHIP (3-12) The Mathematics internship is designed to provide pre-professional skills to interested majors. Business, industry, educational or research work are examples of areas in which students can bring together academic training and practical experience.

480 (CIS 480) OPERATIONS RESEARCH (3) The development and use of the techniques of operations research. Topics include linear programming, queuing theory, probabilistic inventory models, and simulation. Prerequisites: MA 160 and 280, or permission of instructor.

497 INDEPENDENT STUDY (1-3) (See page 32 for course description.)

MUSIC (MUS, APMU, ENMU)

MUS

100 INTRODUCTION TO MUSIC (3) A study of the principal musical media of the most basic musical materials with which composers have worked, and a brief survey of the most important and most popular compositions from the time of the early Baroque to the present. Designed for the non-music major.

111 BASIC MUSIC I (3) Development of vocabulary; study of modes, scales, harmonic rhythmic, and composition techniques. Supportive examples selected from all periods of music. Sight singing and dictation. 2 Lect., 2 Rec.

112 BASIC MUSIC II (3) Continuation of Basic Music I. Analysis and creative projects involving Baroque practices of figured bass, functional harmony, modulation, and altered chords. 2 Lect., 2 Rec.

122 CLASSIC AND ROMANTIC MUSIC (2 or 3) An historical survey of Western European and Early American musical literature and musical styles of the Classic and Romantic Era. 2 Lect., 1 Lab.

123 POST ROMANTIC AND 20TH CENTURY MUSIC (2 or 3) An historical survey of Western European and American musical literature and musical styles beginning with the post-Romantic era through main currents of 20th century composition, and concluding with an examination of contemporary styles. Prerequisite: MUS 122 or permission of instructor. 2 Lect., 1 Lab.

131 **EURYTHMICS I** (1) Laboratory experience in rhythmic movement to develop skill and greater perception of rhythms most frequently encountered. The Jacques-Dalcroze philosophy is followed. 2 Lab.

132 **EURYTHMICS II** (1) Continuation of MUS 131. Designed to develop greater sensitivity to and awareness of the nuances of dynamics and rhythm. Prerequisite: MUS 131. 2 Lab.

213 **BASIC MUSIC III** (3) A study of more elaborate harmonic and formal structures. Examination of macro-micro elements in relation to performance practices. Creative and analysis projects based on fugal style, rondo and sonata form, and the art song. 2 Lect., 2 Rec.

214 **BASIC MUSIC IV** (3) Examination of contemporary techniques. Examples selected from Debussy to post-1950. Creative projects involving the whole tone and twelve-tone scales, also, aleatoric and electronic compositions. Sight singing and dictation to include atonal pitch sets. 2 Lect., 2 Rec.

222 **MEDIEVAL AND RENAISSANCE MUSIC** (2 or 3) An historical survey of Western European musical literature and musical styles beginning with the early Christian era through the Renaissance. Prerequisite: MUS 122 or permission of instructor. 2 Lect., 1 Lab.

223 **BAROQUE MUSIC** (2 or 3) An historical survey of Western European musical literature and musical styles of the Baroque Era. Prerequisite: MUS 122 or permission of instructor. 2 Lect., 1 Lab.

224 **INTRODUCTION TO JAZZ** (3) A study of the evolutionary history of jazz from the earliest African and European influences to the present. An emphasis will be placed on listening experiences and developing an awareness of the unique role of jazz in American culture. Open to all students.

225 **JAZZ STYLES AND ANALYSIS** (3) An in-depth examination and analysis of the stylistic features of the important performers and periods of jazz. Ability to read music required.

311 **ORCHESTRATION** (2) Characteristics of orchestral instruments; scoring for various instrumental groups. Prerequisite: MUS 214 or permission of instructor. 2 Lect., 1 Rec.

312 **JAZZ ARRANGING I** (2) A course in the study of techniques in arranging for modern jazz ensembles of all sizes. 1 Lect., 2 Lab.

313 **JAZZ ARRANGING II** (2) A more advanced course in the styles and techniques of arranging for modern jazz ensembles of all sizes. 1 Lect., 2 Lab.

315 **ADVANCED HARMONY** (3) Harmonic techniques of the late nineteenth and early twentieth centuries; interrelationship of harmonic vocabulary and musical form. Prerequisite: MUS 214.

316 **COUNTERPOINT** (3) A study of the contrapuntal style of the late 17th and early 18th centuries. Prerequisite: MUS 214.

321 **PIANO LITERATURE I** (2) A detailed study of the literature of the piano from the keyboard works of the late Renaissance through the piano works of the 18th century.

322 **PIANO LITERATURE II** (2) A detailed study of the literature of the piano from the 19th century to the present day.

324 **JAZZ ENSEMBLE MATERIALS AND TECHNIQUES** (2) A course designed to acquaint prospective directors of secondary school performing jazz ensembles with materials and techniques appropriate to the idiom. Should also be highly useful to

other students whose interests lie in amateur or professional jazz ensemble performance outside of educational institutions. 1 Lect., 1 Lab.

331 **CHORAL CONDUCTING** (2) Designed to prepare the future music educator for the responsibilities of organizing, teaching, and conducting choral organizations of varying levels of achievement, particularly those of the junior and senior high school age groups. Actual experience in conducting the class as a choral organization is an integral part of the course. Prerequisite: MUS 112. 2 Lect., 1 Rec.

332 **INSTRUMENTAL CONDUCTING** (2) Preparation for conducting instrumental groups with particular emphasis on individual development of communicative and control techniques of conducting motions as well as rehearsal and performance techniques. Actual experience is provided through the conducting of a laboratory band and orchestra. Video-taping is utilized extensively with each individual. Prerequisite: MUS 112. 2 Lect., 1 Rec.

381 **MUSIC IN THE ELEMENTARY SCHOOL** (2) A study in teaching the elements of music through musical activities emphasizing the discovery approach. The course includes a survey of current appropriate materials and observation/participation in area elementary schools. Prerequisites: MUS 112 and 5 Hrs. Pre-Professional Experience. 2 Lect., 1 Lab.

382 **MUSIC IN THE SECONDARY SCHOOL** (2) A study in teaching musical concepts, knowledge, and skills in music classes and activities of the secondary school, grades 7-12, with emphasis on vocal music and general music classes. Development of a basic philosophy of music education at the secondary level. Prerequisites: MUS 112, MUS 381, and 5 Hrs. Pre-Professional Experience. 2 Lect., 1 Lab.

383 **INSTRUMENTAL MUSIC IN PUBLIC SCHOOLS** (2) Study of a suitable instrumental program for a public school system with particular attention to the class teaching techniques of the various instruments. Problems of organization and administration of such a program; survey and examination of the available instructional material. Prerequisites: MUS 112 and 5 Hrs. Pre-Professional Experience. 2 Lect., 1 Lab.

400 **(ED) STUDENT TEACHING** (12) Student teaching under supervision of master teachers. Required of all students working for a degree in teacher education for certification to teach music in the public schools of Pennsylvania.

417 **COMPOSITION I** (3) Contemporary techniques of musical composition; emphasis on creative work. Prerequisite: MUS 214 or permission of instructor. 2 Lect., 1 Rec.

418 **ADVANCED COMPOSITION** (3) A course in Advanced Composition for students interested in more intensive work than can be provided in Composition I. A continuation of Composition I.

421 **AMERICAN MUSIC** (3) The historical background and development of music in the United States from Colonial times to the present. A study of the principal composers and their music. Reading, research, and listening emphasized.

422 **THE SYMPHONY** (3) A study of orchestral music from its beginning. The Mannheim composers, the Viennese classics, the Romanticists and contemporary developments. Works will be analyzed and their historical, cultural, and philosophical backgrounds discussed.

423 **THE CONCERTO** (3) A study of the concerto form with emphasis upon the development of the form and the stylistic contributions of the great masters. Representative works will be studied in score and recordings.

424 **ADVANCED MUSIC LITERATURE** (3) Intensive study of selected choral, solo, chamber and orchestral masterpieces; emphasis on formal and stylistic developments.

425 **CONTEMPORARY MUSIC** (3) A survey of the styles, forms, and musical techniques of contemporary music.

426 **WORLD MUSICS** (3) A definition of the discipline of ethnomusicology, its history and objectives will be followed by a discussion of the basic descriptive and analytical procedures, bibliography, and techniques.

430 **MUSIC FOR EARLY CHILDHOOD** (1) An exploration and study of the ways in which music can contribute to the education of the pre-school child. Musical activities and techniques will be demonstrated. Teaching materials and appropriate music literature will be examined and explored.

440 **MUSIC THEATRE PRODUCTION** (2) A study of the techniques necessary to direct and stage music drama in school and community; setting up a production staff, proper rehearsal methods, public relations aspects. Creating music drama from existing musical productions. 2 Lect., 1 Lab.

475 **WOODWIND PEDAGOGY** (2) A course to acquaint the students with the woodwind instruments and their solo and ensemble literature. Lecture, demonstration, films, tapes, and recordings presented for flute, oboe, bassoon, clarinet, and saxophone.

476 **BRASS PEDAGOGY** (2) A study of the techniques, teaching problems, teaching materials, history, and literature related to the brass instruments.

480 **MUSIC WITH THE HANDICAPPED** (3) An interdisciplinary approach to the use of music with the mentally retarded, the physically handicapped, and pupils having behavioral disorders, with specific focus on social and educational goals. Theories of the effects of music on behavior. Musical materials and their use. Practice in organizing and presenting projects based on these theories and materials. Varied lab experiences in music learnings. Visits and mini-participations in actual situations as a functional part of the course.

484 **PIANO PEDAGOGY** (2) Study of procedures for class and individual instruction; emphasis upon the ear approach as the basis for reading, true musical perception and intelligent understanding of the printed page; examination and evaluation of materials suitable for the first years of piano study. Prerequisite: Permission of the instructor. 2 Lect., 1 Lab.

485 **MARCHING BAND TECHNIQUES** (2) A detailed study of the marching band including philosophy, styles, charting, music, materials, instrumentation, administration, and contemporary techniques. 2 Lect., 1 Lab.

486 **DICTION FOR SINGERS** (3) A study of a systematic approach to pronunciation in solo and choral literature in English, Italian and Latin, French and German. The International Phonetic Alphabet will be used with emphasis on those elements of pronunciation which require modification from spoken to singing language. Will include listening, class performance, and teaching experiences. Open to graduates and undergraduates. 2 Lect., 1 Rec.

487 **SONG LITERATURE** (3) The development of monophonic song from the days of the Troubadours and Trouveres to the present time. Emphasis especially upon the history of the German lied, the French chanson or melody and solo song in the British Isles and the United States. The course will also include the major composers of song in the Slavic countries, Spain, South America and Scandinavia.

488 **MUSIC MERCHANDISING** (3) Presents an overall view of music merchandising, describes the various types of retailing, and acquaints the student with the administration, advertising, marketing processes, and consumer orientation necessary

for the education of a person in the retail-wholesale aspects of the music industry. Prerequisites: Bus. 130, CIS 105 or consent of instructor.

490 **PRACTICUM IN PIANO TEACHING** (1) A laboratory course designed to help future piano teachers in class and private teaching of young beginners. ½ Lect., 2 Lab.

497 **INDEPENDENT STUDY** (See page 32 for course description.)

APMU

011 **PIANO CLASS** (0) Remedial piano study for those unable to meet entrance requirements. Subject to availability of staff. 2 Lab.

101 **VOICE CLASS I** (1) Development of proper vocal production, poise, and confidence in solo singing. Remedial work for individual problems. 2 Lab.

102 **VOICE CLASS II** (1) Continuation of Voice Class I. Prerequisite: APMU 101. 2 Lab.

111 **CLASS PIANO** (1) For the student with limited piano skill. Prerequisite: Fulfillment of entrance requirements for secondary piano, which consists of the ability to perform with reasonable fluency at least five pieces from the last pages of any standard First Grade instruction book (such as Thompson, Schaum, Fletcher, Kasschau, et al.), and to play at sight pieces from the first half of a similar book. The class size shall be limited to one person for each available keyboard. This course cannot be repeated for credit. 2 Lab.

113 **KEYBOARD SKILLS I** (1) Intensive work in accompanying melodies in major and minor keys, with beginning work in modal harmony. Development of varied accompanimental styles, improvisation, command of functional harmony, "playing by ear," transposition, sight reading melodies from elementary music, and harmonizing these melodies at sight. Prerequisite: Basic Music II. 1 Lab.

114 **KEYBOARD SKILLS II** (1) Continuation of Keyboard Skills I. More complex accompanimental styles, secondary dominant chords, improvisation, transposition, "playing by ear," modulatory techniques, sight reading from junior high music series, sight reading melodies supplying appropriate accompaniment. Prerequisite: Keyboard Skills I or equivalent. 1 Lab.

115 **FUNDAMENTALS OF JAZZ IMPROVISATION I** (2) A course in the materials, styles, and techniques of creative and spontaneous jazz performance. An important course for all students interested in the performance of jazz. 1 Lect., 2 Lab.

116 **FUNDAMENTALS OF JAZZ IMPROVISATION II** (2) Continuation of Fundamentals of Jazz Improvisation I. APMU 116 is an important course for all students interested in the performance of jazz. 1 Lect., 2 Lab.

117 **ADVANCED JAZZ IMPROVISATION I** (2) A course designed to motivate and crystalize the improvisational abilities of the serious jazz musician. Emphasis will be placed on the development of a highly individualized and creative style. 1 Lect., 2 Lab.

118 **ADVANCED JAZZ IMPROVISATION II** (2) Continuation of Advanced Jazz Improvisation I. APMU 118 is an important course for all students interested in the performance of jazz. 1 Lect., 2 Lab.

130 **FLUTE CLASS** (1) Designed to give the fundamental principles and techniques necessary for playing and teaching the flute; study of the literature appropriate for beginning class instruction. ½ Lect., ½ Rec.

132 **CLARINET CLASS** (1) Designed to give the fundamental principles and techniques necessary for playing and teaching the clarinet; study of the literature appropriate for beginning class instruction. ½ Lect., ½ Rec.

133 **DOUBLE REED CLASS** (1) Fundamental principles and techniques for playing and teaching oboe and bassoon; making and adjusting of double reeds; study of the literature appropriate for beginning class instruction. Prerequisite: Previous woodwind experience. ½ Lect., ½ Rec.

134 **ADVANCED WOODWIND CLASS** (1) Instruction in woodwind instruments will be given on a level beyond that of the beginning courses. Students will be introduced to more scales, more advanced work with embouchure, tone, tonguing, in addition to suitable literature for the various instruments as reflected by the skill and advancement of the students. 1 Rec.

135 **SAXOPHONE CLASS** (1) Instruction in the latest fundamentals of saxophone performance and pedagogy. Students will have the opportunity to study all members of the saxophone family as availability of instruments permits. The course will include a survey of saxophone literature pertinent to elementary instruction. 1 Rec.

140 **TRUMPET CLASS** (1) Designed to acquaint students with the techniques of trumpet playing and teaching. Emphasis upon development of teaching ability. ½ Lect., ½ Rec.

141 **HORN CLASS** (1) Fundamental principles and techniques of playing the horn. ½ Lect., ½ Rec.

142 **TROMBONE CLASS** (1) Designed to acquaint students with the techniques of trombone playing and teaching. Emphasis upon development of teaching knowledge. ½ Lect., ½ Rec.

143 **ADVANCED BRASS CLASS** (1) Instruction in Brass instruments will be given on a level beyond that of the beginning courses. Students will be introduced to scales in various articulations and ranges, more advanced technical work and styles, in addition to suitable literature for the various instruments as reflected by the skill and advancement of the students. 1 Rec.

144 **TUBA CLASS** (1) Tuba Class is designed to acquaint the student with the techniques of playing and teaching both tenor and bass tubas. The course meets for one hour each week with approximately half of the time devoted to playing and the other half devoted to teaching techniques and materials. ½ Lect., ½ Lab.

151 **STRING CLASS I** (1) Designed to acquaint the non-string player with the basic elements of stringed instrument playing. Students learn to play the various instruments, not only learning the fundamentals of correct playing, but becoming familiar with some of the problems of class instruction found in typical elementary school string classes. 1 Lect., 1 Rec.

152 **STRING CLASS II** (1) Continuation of String Class I. Students are expected to specialize on violin, viola, cello, or bass. Keys up to four sharps and two flats are presented with corresponding fingering problems. Bass players introduced to various positions; cello students learn extended second finger pattern. Various staccato bowing patterns introduced; violin and viola students practice simple third position exercises. Principles of vibrato presented. 1 Lect., 1 Rec.

153 **ADVANCED STRING CLASS** (1) Instruction in stringed instruments will be given on a level beyond that of the beginning courses. Students will be introduced to scales in various positions, more advanced work with the various staccato and spiccato bowings, in addition to suitable literature for the various instruments as reflected by the skill and advancement of the students. 1 Rec.

154 **GUITAR CLASS** (1) Beginning study of the guitar. Functional use of the guitar in the music classroom. Accompanying singing. 1 Rec.

160 **PERCUSSION CLASS** (1) Study of the characteristics of the various percussion instruments; performance techniques; development of performing ability necessary to teach the percussion instruments at the elementary and secondary level of instruction. ½ Lect., ½ Rec.

161 **ADVANCED PERCUSSION CLASS** (1) Instruction in percussion instruments will be given on a level beyond that of the beginning courses. Students will be introduced to more advanced work with the various percussion instruments in addition to suitable literature for the various instruments as reflected by the skill and advancement of the students. 1 Rec.

200 **VOICE I** (½ hr. lesson)

300 **VOICE II** (1 hr. lesson)

210 **PIANO I** (½ hr. lesson)

310 **PIANO II** (1 hr. lesson)

211 **HARPSICHORD I** (½ hr. lesson)

311 **HARPSICHORD II** (1 hr. lesson)

220 **ORGAN I** (½ hr. lesson)

320 **ORGAN II** (1 hr. lesson)

230 **FLUTE I** (½ hr. lesson)

330 **FLUTE II** (1 hr. lesson)

231 **OBOE I** (½ hr. lesson)

331 **OBOE II** (1 hr. lesson)

232 **CLARINET I** (½ hr. lesson)

332 **CLARINET II** (1 hr. lesson)

233 **BASSOON I** (½ hr. lesson)

333 **BASSOON II** (1 hr. lesson)

234 **SAXOPHONE I** (½ hr. lesson)

334 **SAXOPHONE II** (1 hr. lesson)

240 **TRUMPET I** (½ hr. lesson)

340 **TRUMPET II** (1 hr. lesson)

241 **HORN I** (½ hr. lesson)

341 **HORN II** (1 hr. lesson)

242 **TROMBONE I** (½ hr. lesson)

342 **TROMBONE II** (1 hr. lesson)

243 **BARITONE I** (½ hr. lesson)

343 **BARITONE II** (1 hr. lesson)

244 **TUBA I** (½ hr. lesson)

344 **TUBA II** (1 hr. lesson)

250 **VIOLIN I** (½ hr. lesson)

350 **VIOLIN II** (1 hr. lesson)

251 **VIOLA I** (½ hr. lesson)

351 **VIOLA II** (1 hr. lesson)

252 **CELLO I** (½ hr. lesson)

352 **CELLO II** (1 hr. lesson)

253 **BASS I** (½ hr. lesson)

353 **BASS II** (1 hr. lesson)

254 **HARP I** (½ hr. lesson)

260 **PERCUSSION I** (½ hr. lesson)

360 **PERCUSSION II** (1 hr. lesson)

FOR BACHELOR OF MUSIC PROGRAM ONLY: 400 Level courses available in most of the above areas.

ENMU

150 **BAND I** (Concert Wind Ensemble) A highly select concert band of 48 woodwind brass and percussion players selected by audition at the beginning of each semester. In addition to presenting concerts on campus, the Wind Ensemble is a touring ensemble.

151 **BAND II** (Mountie Marching Band) Fall Semester only. Mountie Band performs at all home football games. They are host for the annual Mansfield State College Band Day. Also performs at out-of-town football games, as well as periodic appearances at professional football games, special functions, and international events.

151 **BAND II** (Symphonic Band) Spring semester only. This band is composed of approximately 60 members selected by audition. The Symphonic Band studies a wide variety of band literature and presents concerts on campus.

152 **BAND III** (Varsity Band) Formed after the marching season, this band offers an opportunity for those musicians with more limited ability to participate in a concert organization. It is open to anyone on campus without audition. A concert is given each Spring.

153 **ORCHESTRA I** (College-Community Symphony) Provides an opportunity to participate in the performance of standard symphonic literature. The orchestra presents a concert each semester, accompanies outstanding student soloists, participates in the biennial choral festival, and is a touring ensemble.

154 **ORCHESTRA II** (Training Orchestra) A strong orchestra which provides orchestral training experience for non-string students who have completed two semesters of string class. It offers students string experiences which may enable them to develop their potential for use in Orchestra I, Chamber Ensembles, as a new minor, or as a new personal interest.

156 **CHORUS I** (Concert Choir) A highly select choir of 48 voices. In addition to presenting a concert each semester and joining with the other choruses for a biennial choral festival, the Choir is a touring ensemble.

157 **CHORUS II** (Festival Chorus) A mixed chorus of sophomore, junior, and senior students providing opportunity for experience with and study of great choral literature. The Chorus presents a concert each semester and joins the other choruses for the biennial choral festival.

158 **CHORUS III** (Freshman Chorus) A mixed chorus required of all Freshmen in the music education curriculum. The Chorus presents a concert each semester and joins with the other choruses for the biennial choral festival.

160 **PIANO ENSEMBLE** Study and performance of two-piano and four-hand literature, chamber music, sonatas and trios. Accompaniment of standard instrumental and vocal literature.

161 **PERCUSSION ENSEMBLE** Study and performance of representative works for all combinations of percussion instruments.

162 **OPERA WORKSHOP** Study and performance of operatic and musical comedy scenes chosen according to the abilities of the students in the workshop. Full-scale musical comedy productions done in conjunction with the Department of Speech Communication and Theatre. Students will be given the opportunity, under supervision, to perform in, musically-direct, coach, accompany, conduct, and stage-direct various scenes.

163 **WOODWIND ENSEMBLE** Study and performance of representative works for various woodwind ensembles. One woodwind quintet and one sax quintet take an annual tour.

164 **BRASS ENSEMBLE** Study and performance of representative works for various combinations of brass instruments.

165 **THE MANSFIELDIANS** A pop singing ensemble selected by audition specializing in singing folk, popular, and show music. Available for performances in public schools, service agencies, and alumni functions.

166 **CONCERT JAZZ BAND** The group performs several times each year on campus as well as touring and performing concerts off-campus. Membership is by audition.

168 **STRING ENSEMBLE** Study and performance of standard literature for various types of string ensembles.

169 **CHAMBER SINGERS** A vocal chamber ensemble selected by audition to perform specialized repertoire of the vocal chamber medium. Concerts are given at the College and off-campus by request.

171 **VOCAL ENSEMBLE** Study in performance of representative works for various vocal combinations.

MUSIC THERAPY (MTH)

271 **THERAPY ORIENTATION** (2) A study of environments in which music can be used therapeutically, from psychiatric hospitals, to private practice, and public schools. Visits to many kinds of facilities for broadening the horizon of the student.

310 **PRACTICUM I** (1) 1 Rec.

311 **PRACTICUM II** (1) 1 Rec.

312 **PRACTICUM III** (1) 1 Rec.

372 **PSYCHO-SOCIAL FOUNDATIONS OF MUSIC I** (2) Students will study the functional uses of music, its psychological attributes, and its aesthetic effects. Students will report orally on individual projects.

373 **PSYCHO-SOCIAL FOUNDATIONS OF MUSIC II** (2) A study of the physical attributes of sound as well as basic research practices. Experimental processes will be studied.

471 **INFLUENCE OF MUSIC ON BEHAVIOR** (3) Instruction and research in psychology, education, aesthetics, music and music therapy literature to ascertain the influence of music on the physical, visceral, emotional, aesthetic, and mental well-being of individuals and groups. A study of the ways and reasons music can bring about behavior modifications.

472 **MUSIC IN THERAPY** (3) The use of literature, especially the *Journal of National Association for Music Therapy*, to discover and analyze how music is used in the

healing process and why it has therapeutic efficacy. An indepth study of specific musical activities that help in the rehabilitation of persons with specific disabilities.

475 **INTERNSHIP IN MUSIC THERAPY** (2) Practical experience with the application of the theories of the uses of music in therapeutic settings. A possibility of a choice of the kind of experience available, i.e., hospital, state school, correctional facility, public school special education, private schools, private practice, may be available.

PHILOSOPHY (PHIL)

201 **INTRODUCTION TO PHILOSOPHY** (3) An elementary examination of the basic beliefs adopted by human beings in their religious, scientific, ethical, and political strivings. The course will exercise the student's ability to identify these basic beliefs as well as critically evaluate arguments used in their support. Examples of issues discussed are whether ethical values are relative, the existence of God, and whether scientific knowledge is unshakable. Readings from traditional and contemporary sources will be used.

202 **PHILOSOPHY AND CONTEMPORARY ISSUES** (3) An analysis of the arguments used by both philosophers and non-philosophers in their attempts to solve difficult contemporary problems. Emphasis will be placed on clarifying the basic assumptions of such arguments and evaluating the logical validity of their conclusions. Some examples of the problems discussed include: abortion, euthanasia, capital punishment, censorship and pornography, reverse discrimination, equal rights for women and minorities, animal rights, environmental protection, war and peace, and nuclear safety. The aim of this course is not to reach universal agreement concerning solutions, but to develop responsible presentations of the strengths and weaknesses of a number of proposed treatments. Prerequisite: PHIL 201 or permission of instructor.

220 **EASTERN APPROACHES TO REALITY** (3) An examination of the philosophical perspective of the Eastern mind as exhibited in Hinduism, Buddhism, Taoism, Confucianism, Islam, Zen Buddhism. The primary focus of the course is on the difference between the Eastern and Western modes of looking at the world. Prerequisite: PHIL 201 or permission of instructor.

230 **INTRODUCTION TO LOGIC** (3) A study of the principles of deductive and inductive thinking and of experimental inference; examination of reasoning as applied to specific areas of inquiry.

240 **ETHICS** (3) An examination of how to make rational decisions in situations having an ethical dimension. Major philosophical principles from traditional and contemporary sources will be discussed. Emphasis will be placed on the analysis of contemporary applied problems in ethics, e.g. sexual morality, cheating. The aim of the course is not to impose values on students but to assist them in developing their own abilities to evaluate proposed solutions to ethical problems. Prerequisite: PHIL 201 or permission of instructor.

250 **AMERICAN PHILOSOPHY** (3) An examination of the main schools of American philosophic thought, especially the pragmatic. The course deals with contemporary American philosophy as well as the classical figures in the field. Prerequisite: PHIL 201 or permission of instructor.

270 **EXISTENTIALISM** (3) An analysis of contemporary philosophical trends which stress the unique in man and his value as an individual. Examination of existentialist themes will center upon freedom, commitment, self-determination, and authen-

ticity. Emphasis will be placed upon the writings of Kierkegaard, Nietzsche, Heidegger, and Sartre. Prerequisite: PHIL 201 or permission of instructor.

280 **PHILOSOPHICAL PROBLEMS WITHIN WESTERN RELIGIOUS THOUGHT** (3) An analysis of the validity and presuppositions of experimental and rational ways of proving the existence of God, of the faith-reason dichotomy, and of the "God is dead" movement. An examination of the logical structure of religious language. Prerequisite: PHIL 201 or permission of instructor.

312 **PHILOSOPHY OF SCIENCE** (3) A study of the logical grounds of scientific knowledge and of the methods of scientific discovery. Designed for the non-science student as well as the specialist, the course will focus on such concepts of theory, fact and observation in addition to the notions of scientific revolution and progress. Prerequisite: PHIL 201 or permission of instructor.

303 **THEORIES OF MIND AND KNOWLEDGE** (3) A study of some of the philosophical theories involved in man's understanding of his knowledge. Such concepts as belief, truth, intelligence, imagination, perception, appearance, and reality will be discussed as well as philosophical problems raised by recent theories of human behavior in psychology and the social sciences. Prerequisite: PHIL 201 or permission of instructor.

302 **AESTHETICS** (3) A detailed survey of both classical and modern aesthetic theories along with a criticism of each. Prerequisite: PHIL 201 or permission of instructor.

315 **POLITICAL AND LEGAL PHILOSOPHY** (3) A study of some of the philosophical concepts at play in recent political and legal situations, such as justice, treason, civil disobedience, revolution and violence. Attention will also be focused on the philosophy of law and the role of education in the achievement of social ends. Prerequisite: PHIL 201 or permission of instructor.

385 **LINGUISTIC ANALYSIS** (3) An examination of the logical structures of descriptive and nondescriptive linguistic activities. Emphasis will be placed upon the picture theory of representational language as presented in Ludwig Wittgenstein's Tractatus Logico-Philosophicus. Prerequisite: PHIL 201 or permission of instructor.

410 **TWENTIETH-CENTURY ANALYTIC PHILOSOPHY** (3) Analytic philosophy (sometimes called linguistic philosophy) is the dominant school of philosophy today in the English speaking world. Such questions will be discussed as: Can you be sure there is a physical world; can you prove it; can you know there are minds other than yours; what kind of knowledge, if any, do the senses give us; and how does the philosopher try to dissolve problems rather than solve them?

420 **CLASSICAL GREEK PHILOSOPHY** (3) A detailed analysis of the writings of one or more of the classical Greek thinkers. Such philosophers as Plato, Aristotle, Heraclitus, Parmenides, and Plotinus will be discussed. Prerequisite: PHIL 201 or permission of instructor.

421 **PHILOSOPHY OF THE MIDDLE AGES** (3) An examination of the thinking of the major philosophers of the Middle Ages, especially Augustine, Aquinas, Ockham, and Duns Scotus. To acquaint the student with the main lines of philosophical thought in the Middle Ages, the course will focus on such issues as the relation between faith and reason, the existence of universals, and the proofs for God's existence.

422 **FOUNDATIONS OF MODERN PHILOSOPHY** (3) A study of the speculative thought of the early modern scientists whose investigations culminated in the development of the modern scientific mood. Hobbes, Locke, Berkeley, Hume, Descartes, Leibniz, and Spinoza — philosophers who make up the schools of rationalism and empiricism — will be discussed. Some problems dealt with are: the mind-body

problem, the status of ideas, and the nature of perception. Prerequisite: PHIL 201 or permission of instructor.

423 **CONTEMPORARY PHILOSOPHY** (3) Analysis of the defining features of major contemporary philosophical movements, with attention primarily to logical positivism, pragmatism, and existentialism. Prerequisite: PHIL 201 or permission of instructor.

450 **INTERNSHIP** (12)

490 **SEMINAR IN PHILOSOPHY** (1-3) A supervised study into a specialized problem in philosophy or into the writings of a specific philosopher or philosophic movement. Prerequisite: PHIL 201 or permission of instructor.

497 **INDEPENDENT STUDY** (1-3) (See page 32 for course description.)

PHYSICS (PHYS)

130 **HOUSEHOLD PHYSICS** (3) Introduction to the basic concepts of physics by utilizing devices and appliances used in the home today. 2 Lect., 2 Lab.

151 **PHYSICS FOR POETS** (4) An introduction to both classical and modern physics without the use of calculus. Designed to enable the student to appreciate the role of physics in society. 3 Lect., 2 Lab.

152 **MORE PHYSICS FOR POETS** (4) Continuation of Phys. 151. 3 Lect., 2 Lab.

160 **PHYSICS OF MUSICAL SOUND** (3) A non-mathematical approach to the physical principles involved in the generation, transmission and detection of sound. 2 Lect., 2 Lab.

165 **PHYSICS FOR THE ALLIED SCIENCES** (3) This course is designed to give students in the Allied Health Sciences the physics background they need for their professional work. Selection of material is based on the appropriateness to the life sciences without limiting basic concepts found in all introductory physics courses. 2 Lect., 2 Lab.

170 **INTRODUCTION TO ELECTRONIC APPARATUS** (3) Elementary principles of electrical circuits are taught in lecture and extensively applied in the laboratory by building kits (radio, meters, amplifiers, etc.) of the students' choice. Study for third and second class FCC licenses is available. 1 Lect., 4 Lab.

188 **GENERAL PHYSICS I** (4) A three-semester calculus physics course emphasizing classical concepts. Selected topics in mechanics, heat, electrostatics, electromagnetism, waves and optics. Prerequisite: Math 140 or taken concurrently with Phys. 188. 3 Lect., 1 Recit., 2 Lab.

191, 192 **PHYSICS I, PHYSICS II** (4) A one year sequential calculus-physics course discussing classical mechanics, fluids, thermodynamics, classical electricity and magnetism, optics and waves, modern physics. Application of physics to life science is made in problem selection and laboratory experimentation. Corequisite for Phys. 191: Calculus I. For Phys. 192: Phys. 191 or Phys. 188. 3 Lect., 2 Lab., 1 Recit.

211 **GENERAL PHYSICS II** (4) Continuation of Phys. 188 or 191. 3 Lect., 1 Recit., 2 Lab.

212 **GENERAL PHYSICS III** (4) Continuation of Phys. 211. 3 Lect., 1 Recit., 2 Lab.

250 **THE RESTLESS ATMOSPHERE** (3) An introduction to dynamical meteorology which includes general circulation theory, energy budget, instrumentation, weather modification. Prerequisite: High school physics or higher or permission of instructor. 2 Lect., 2 Lab.

311 **MODERN PHYSICS** (3) An introduction to 20th century physics, including the structure of atoms and nuclei, basic ideas of quantum mechanics and solid state theory. Prerequisites: Phys. 188, 211.

312 **MODERN PHYSICS II** (3) Continuation of Phys. 311. 3 Lect.

313 **PHYSICAL MECHANICS I** (3) An analytic treatment of classical mechanics covering the methods of statics and dynamics of rigid bodies with application to physical problems; small oscillations; generalized coordinates and Lagrange's equations. Prerequisites: Phys. 188, Math 241 and 311.

314 **PHYSICAL MECHANICS II** (3) Continuation of Phys. 313.

315 **EXPERIMENTAL PHYSICS I** (3) Experiments in electrical measurements and circuit elements, optics and atomic physics. Prerequisite: Phys. 211. 1 Lect., 4 Lab.

316 **EXPERIMENTAL PHYSICS II** (3) Continuation of Phys. 315. 1 Lect., 4 Lab.

317 **PHYSICAL OPTICS** (3) Wave phenomena, electromagnetic theory of light, interference, diffraction, polarization and nonlinear optics. Prerequisites: Phys. 212, Math 311.

318 **THERMODYNAMICS** (3) An introduction to thermal physics and kinetic theory. Prerequisites: Phys. 212, Math 311.

319 **INTRODUCTION TO SOLID STATE PHYSICS** (3) A brief summary of the theory underlying the behavior of solids. Emphasis on transport theory, interaction of light and matter, semiconductor devices, superconductors and lasers. Prerequisite: Phys. 311.

320 **ACOUSTICS** (3) Fundamentals of sound waves including generation, transmission and detection of sound. 2 Lect., 2 Lab.

321 **SELECTED TOPICS I** (3) Any selected topics not sufficiently well covered in a general course. 3 Lect.

322 **SELECTED TOPICS II** (3) Same as Phys. 321.

333 **SPACE DYNAMICS** (3) Application of Newtonian mechanics to solution of actual problems in satellite trajectories and orbit; celestial mechanics and navigation. Prerequisites: Phys. 188, Math 212.

334 **ASTROPHYSICS** (3) Application of physics and mathematics to field of astronomy. A study of stellar models, stellar evolution, radio astronomy and recent discoveries in astronomy. Prerequisites: Phys. 311, Math 311.

401 **ELECTRICITY AND MAGNETISM I** (3) Foundations of electromagnetic theory including electrostatics, dielectric theory, magnetic properties.

402 **ELECTRICITY AND MAGNETISM II** (3) Continuation of Phys. 401.

407 **INTRODUCTION TO QUANTUM MECHANICS** (3) An introduction to wave mechanical and axiomatic approaches to quantum mechanics with simple application. Prerequisites: Phys. 311, Math 311.

408 **ATOMIC AND NUCLEAR PHYSICS** (3) Continuation of Phys. 407; physical applications of quantum mechanics to atomic and nuclear physics.

415 **EXPERIMENTAL PHYSICS III** (3) Research problems are assigned to the student on an individual basis. 6 Lab.

416 **EXPERIMENTAL PHYSICS IV** (3) Same as Phys. 415. 6 Lab.

450 **CURRENT SCIENTIFIC PHENOMENA** (1-3) This course permits students to take advantage of important temporary phenomena. Thus credit hours, period and time of

presentation and instructional personnel must vary. Selection of topics will be based upon intrinsic value and interest as well as importance for other courses.

POLITICAL SCIENCE (PSCI)

100 INTRODUCTION TO POLITICS (3) This course is designed to provide non-majors with a general introduction to the basic issues, trends, and dilemmas of contemporary politics. By focusing on ways in which politics affects our daily lives and by relating this to historical and comparative contexts, the course should generate a better understanding of, and lasting interest in, the student's own political system.

101 AMERICAN POLITICS (3) A study of the basic organization of our national government, covering democratic principles, constitutional foundations, federalism, civil rights, the political party system, governmental branches and their functions, federal regulations and welfare services. Required for political science majors. 2 Lect., 1 Recit.

202 STATE AND LOCAL POLITICS (3) An inquiry into the structure, organization of the states and their locales; such problems and issues as federalism, taxation, and intergovernmentalism are discussed. 2 Lect., 1 Recit.

203 POLITICAL PARTIES AND INTEREST GROUPS (3) A study of the development and nature of the American Party System; party activities in and out of government; the interaction of political parties and interest groups; the role of interest groups in government; the nomination and electoral system. 1 Lect., 2 Recit.

206 POLICY INFORMATION AND IMPLEMENTATION (3) This course is concerned with what governments do, why they do it and what difference it makes. The course will focus on specific topic areas (e.g. health care, bussing, etc.) which will vary from year to year. Prime emphasis will be placed on description, analysis and explanation of the causes and consequences of governmental activity. 2 Lect., 1 Recit.

210 CONTEMPORARY ISSUES IN WORLD AFFAIRS (3) Examination of twentieth-century problems of the nation-state system; power, national interest, alliances, neutralism, colonialism, regionalism, and the United States. 2 Lect., 1 Recit.

216 POLITICAL LEADERSHIP (3) Personal, social and political sources of leadership. Styles, settings and techniques of leadership will be covered. Major emphasis will be placed on presidential leadership in the United States. However, comparisons will be made of styles in both eastern and western settings. Among the leaders studied will be Roosevelt, Nixon, Che, Lenin and Mao. 2 Lect., 1 Recit.

235 INTRODUCTION TO POLITICAL ANALYSIS (3) This course deals with the methods of comparison and introductory political analysis as applied to political systems and individual political behavior. Examination of power, authority, leadership, decision-making, voting behavior. Examples will be drawn primarily from the American political process. 1 Lect., 2 Recit.

240 PUBLIC ADMINISTRATION (3) An examination of the roles and characteristics of bureaucracy in modern government. Administrative decision-making is analyzed in terms of the relationship between organizational structures and social and political environments.

302 PRESIDENT AND CONGRESS (3) A study of the ways in which the political and governmental institutions of the Congress and Presidency have developed and the ways in which they manage their relationships with each other. Emphasis will be placed upon recent development of the branches and the areas of potential con-

flict and cooperation between the two. Attention will be given to political recruitment, especially to the functions of the electoral system, political parties and the mass communications media. 1 Lect., 2 Recit.

304 PUBLIC OPINION AND POLITICAL BEHAVIOR (3) Analysis of the role of public opinion in the political system. The process by which political opinions are formed, communicated and influence political behavior. The design and administration of a survey to measure political opinions. 1 Lect., 2 Recit.

305 URBAN POLITICS (3) An analysis of the interrelated problems of class, race and social change in urban places. Attention will be given to political organizations, minority groups and the relationships between local and national politics. Special emphasis is placed on the public policies directed toward the problems of the cities. 1 Lect., 2 Recit.

310 U.S. FOREIGN POLICY (3) United States foreign policy in the period since World War II is examined with emphasis on American interest in key areas. American values in foreign policy, roles of leaders instrumental in creating and developing foreign policy objectives. 2 Lect., 1 Recit.

312 MODERNIZATION AND POLITICS IN THE CONTEMPORARY WORLD (3) The political systems of Great Britain, France, West Germany and the Soviet Union will be studied and compared. Investigation of political cultures, elites, party systems and the policy-making processes, factors contributing to consensus and cleavage, problems of technological societies. 2 Lect., 1 Recit.

313 COMMUNIST POLITICAL SYSTEMS (3) A comparative survey of the political systems of the USSR, China and other selected communist states. The role of ideology, the Communist Party and the intellectuals will be investigated. Attention will be given to the analysis of the political process and selected policy areas. The interaction of communist states as well as their relationships with the non-communist states in a changing international environment will be examined. 2 Lect., 1 Recit.

315 SELECTED AREAS AND TOPICS IN COMPARATIVE POLITICS (3) Cross-national analysis of the political values, processes and institutions of selected groups of nation-states. In any given semester, the course will focus on one of the following areas: Asia, Sub-Saharan Africa, Latin America, Middle East, Europe. Special attention will be given to questions concerning political change and economic growth. 2 Lect., 1 Recit.

321 CONSTITUTIONAL LAW (3) An inquiry into the general principles of the American constitutional system with special reference to the role of the judiciary in the interpretation, enforcement and development of the Federal constitution. 1 Lect., 2 Recit.

323 CIVIL RIGHTS AND CIVIL LIBERTIES (3) A study of civil rights in the American constitutional system with special reference to the role of the judiciary in the protections of individual liberties. 1 Lect., 2 Recit.

331 DEVELOPMENT OF WESTERN POLITICAL THOUGHT (3) A study of fundamental problems in western political thought. Topics investigated will include sources of authority and obedience, origins and functioning of the policy, the role of law in government, relationship between state and individuals, characteristics of the good state. The core of readings consists of selections from classic works of Western political theory. Prerequisite: junior standing. 2 Lect., 1 Recit.

333 FOUNDATIONS OF MODERN POLITICAL THOUGHT (3) This course investigates the major political ideas of the 19th century — liberalism, conservatism, nationalism, socialism, and communism — as the foundation for 20th century

ideologies, with emphasis on their analysis as attempts to solve the problems of industrial society. 1 Lect., 2 Recit.

335 **AMERICAN POLITICAL THOUGHT** (3) An examination of the major phases of American Political Thought through the writings of selected political thinkers. Special emphasis will be given to the analysis and development of political ideas in relation to their continuing impact on political debate and action. 2 Lect., 1 Recit.

342 **ORGANIZATIONAL THEORIES** (3) An examination of the development of varied major approaches and theories of organization and administration with special emphasis on evolving concepts about organization-administrative behavior. 2 Lect., 1 Recit.

344 **PERSONNEL MANAGEMENT** (3) To serve as an introduction to the field of personnel administration; to delineate and encompass the field; to synthesize knowledge and experience; to point out problems, issues and trends; to reflect insights of the leading authors, researchers and practitioners; to chart sources for more extensive or specialized information; to provide potential and current practitioners with a balanced view of the subject; and, to provide novices with a stimulus for scholarship and vocational inspiration. 2 Lect., 1 Recit.

345 **GOVERNMENT AND BUSINESS IN SOCIETY** (3) This course will investigate the work of selected independent regulatory agencies — examining their interaction with relevant others in the political process, intent of appropriate legislation, procedures by which they operate as well as the substantive content of their decisions. Attention will be given to the issue of regulation in the public interest as interpreted by the agency and the courts and to consumer movements. Evaluation and proposals to reform the regulatory process will be considered. 2 Lect., 1 Recit.

347 **FINANCIAL SYSTEMS AND BUDGETARY PROCESS** (3) An examination of the development of budgeting and budgetary reform from early "accountability" through "effectiveness" and "efficiency," to current "planning" and "programming" concepts. Emphasis is given to the study of the political process in budgeting, with an attempt to reconcile political rationality with management science. 2 Lect., 1 Recit.

450 **INTERNSHIP** (1-12) The Political Science Internship is designed to give a student actual experience in the work of an agency and an understanding of the agency's position in the community. Further, the intern should become aware of the agency's philosophy and goals, the formal and informal organization of the agency, and the role of the agency in the political system.

497 **INDEPENDENT STUDY** (See page 32 for course description.)

PSYCHOLOGY (PSY)

101 **INTRODUCTION TO APPLICATIONS OF PSYCHOLOGY** (3) Designed to familiarize students with the application of scientific psychology to human life. Emphasis is on "normal" behavior and its antecedents. The study of broad categories of human behavior through various psychological models and their application to understanding human behavior. 2 Lect., 1 Lab.

105 **PARENT-CHILD COMMUNICATION** (3) An applied course in the psychology of child rearing based on modern principles of behavior. Procedures will be covered for the modification of problem behavior as well as the formation of desirable habits. Supervised projects will be used to insure a working knowledge of the techniques. 2 Lect., 1 Lab.

150 INTRODUCTION TO SCIENTIFIC PSYCHOLOGY (1) The course is designed for those who expect to continue in upper division psychology courses. Through directed reading and presentation by student participants, faculty, and invited presenters, and the basic PSY 101 course, students will be provided familiarity with (1) the broad range of facts which form the body of psychology, (2) research strategies for fact finding, and (3) theories of behavior which serve as an organizational framework. Prerequisite: Prior or concurrent PSY 101. 1 Recit.

200 SURVEY AND DATA ANALYSIS (3) A survey of non-experimental methods for researching applied psychological problems. Emphasis will be upon survey and field techniques. The student will design, conduct, and prepare a major project. Prerequisite: PSY 101. 2 Lect., 1 Lab.

201 TESTS AND MEASUREMENTS OF PSYCHOLOGY (3) Delineation of measurement theory as well as actual experience with intelligence, aptitude, achievement, interest and personality tests. Theory and experience used to formulate guidelines by which to evaluate these tests as measuring devices with special attention to their applicability and limitations. Prerequisite: PSY 200 or permission of instructor. 2 Lect., 1 Lab.

210 PSYCHOLOGY OF FAMILY RELATIONS (3) Basic course designed to present insights from both clinical and academic psychology through reading in such areas as the psychological dynamics of the family as a unit, parent-child interactions, the effect of developmental events on the psychology of the family. Class discussion and psychodrama will be used to illustrate these concepts. Prerequisite: PSY 101.

212 HUMAN SEXUALITY (3) A survey of scientific findings in the area of human sexual behavior. Besides covering the traditional areas of reproduction, topics of current interest and controversy will be included. Small group discussions will be used to facilitate an exchange of ideas. Prerequisite: PSY 101.

222 PSYCHOLOGICAL DEVELOPMENT OVER THE LIFE SPAN (2) The course will present an overview of the major age-related differences and changes in human behavior and experience, starting with the prenatal period through infancy, preschool and school aged childhood, adolescence, young adulthood, middle adulthood, and late adulthood. Prerequisite: PSY 101.

230 EDUCATIONAL PSYCHOLOGY (3) A study of the basic factors in the learning process, with emphasis on the application of principles of psychology to problems of learning and teaching. Prerequisite: PSY 101.

250 EXPERIMENTAL DESIGN I: FUNDAMENTAL PRINCIPLES (4) Will provide the student with information concerning the basic formats used in scientific investigations, the alternative types of investigatory procedures used by professional psychologists, and the ways to implement the various experimental and nonexperimental designs. It will offer an opportunity to develop general analytical skills and sharpen the ability to diagnose which type of scientific investigation should be used in any given situation. Prerequisites: PSY 101 and MA 105. 3 Lect., 2 Lab.

251 EXPERIMENTAL DESIGN II: IMPLEMENTATION, ANALYSIS, AND REPORT WRITING (4) Advanced analytical course for psychology majors; involves designing, analyzing, and writing reports of the investigations they conduct. The primary emphasis is on acquiring information and skills concerned with the identification and definition of problems which would be feasible to investigate scientifically and with the issues of how to design useful experiments for the purposes of empirically testing the hypotheses set forth. Students will carry out simulated and demonstration projects. Prerequisite: PSY 250. 3 Lect., 2 Lab.

270 PSYCHIC PHENOMENA (3) A survey and scientific analysis of the various behaviors labeled "psychic," including parapsychological, mystical, astrological, and hypnotic. The student will carry out and write up representative experiments. Prerequisite: PSY 101 or permission of instructor. 1 Lect., 1 Recit., 1 Lab.

290 LIFE SPAN DEVELOPMENT (3) The course will be primarily a broad survey of what is presently known about the highly interactive aspects of human behavioral development: biological, psychological, and social. Prerequisite: PSY 101.

291 ABNORMAL PSYCHOLOGY (3) This course is designed to give students a general introduction to clinical and experimental aspects of the field of abnormal psychology. The major models of psychopathology and the causes and symptoms of abnormal thinking and behavior will be considered. Prerequisite: PSY 290 or permission of instructor. 2 Lect., 1 Recit.

300 HELPING SKILLS I (3) Considers modern theory and research in counseling psychology. The development of helping skills is viewed in historical perspective and a variety of modern helping methods are examined. Core dimensions in the helping process are emphasized. Prerequisites: PSY 101 and 291, or equivalent, permission of instructor and upper division standing. 2 Lect., 1 Recit.

301 HELPING SKILLS II (3) Considers advanced theory and applications in counseling psychology. Students are given the opportunity to develop and practice specific helping skills in the classroom. Professional ethics, methods of evaluating change achieved through the helping process, and community applications are examined. Prerequisite: PSY 300. 1 Lect., 2 Recit.

310 SOCIAL PSYCHOLOGY (3) A consideration of the individual aspects of social behavior. Initially attention will be focused on some problems in perception, thinking and motivation. The following topics will be examined: theories of cognitive consistency, theories of attitude formation and their relation to personality structure, motivational determinants of group membership and social conformity, social roles and social systems including leadership. Prerequisite: PSY 101. 2 Lect., 1 Recit., 1 Lab.

311 INTRODUCTION TO SMALL GROUP PROCESSES (3) The course is designed to help the student survey and analyze the constructs, research and principles of application in the study of face to face groups. Using both didactic and laboratory methodologies, four major objectives are pursued. Prerequisite: PSY 101. 1 Lect., 2 Recit.

312 DEVIANT BEHAVIOR AND SOCIAL PROCESS (3) An in-depth study of the psychological theories of deviant minority behavior. Consideration will be given to such areas of deviant behavior as prostitution, homosexuality, juvenile delinquency, suicide, obesity, drug addiction, etc., and the various treatment modalities. Prerequisite: PSY 101. 1 Lect., 2 Recit., 1 Lab.

313 PSYCHOLOGY OF INTERVIEWING (3) An introduction to theoretical methodological and technical considerations of interviewing from a psychological perspective. The course is designed for those interested in the applications of interviewing in an industrial or organizational setting. Skill development is an important part of this course. 2 Lect., 1 Recit.

320 CHILD PSYCHOLOGY (3) Study of how and why children develop as they do, with special emphasis on factors which will (1) help students to better understand their own development, and (2) help students to better understand parent-child and teacher-student relationships. Can be taken concurrently with PSY 320L, Laboratory Research in Psychology for 1 additional credit hour. Prerequisite: PSY 101.

321 ADOLESCENT PSYCHOLOGY (3) Beginning with puberty and following development through the late teens, this course stresses the importance of biologic change, athletics, dating, school, home, church, neighborhood, group loyalties and conflicts, etc., in shaping adolescent attitudes, values, and behavior. In general, the level of conceptualization would likely be most rewarding to the student who is interested in contributing to, as well as gaining some insight into how the aforementioned factors will shape adolescent behavior in a rapidly changing society. Prerequisite: PSY 101.

322 GERONTOLOGICAL PSYCHOLOGY (3) This course is designed to give students a beginning understanding of the problems of the aged and ways in which the final stage of life may be made rewarding. Participation with older people will be included to clarify such problems as loneliness, emotional disturbance, physical and economic restrictions. Prerequisite: PSY 101. 2 Lect., 2 Lab.

323 COGNITIVE AND MORAL DEVELOPMENT (3) The primary objective is to expose students to Piagetian concepts and tasks, and to familiarize them with the important ideas, terminology, theories and data related to the development of logical thought and moral judgment. A secondary objective is to stimulate critical thinking about the issues through the exercise of in-depth analyses of a few of the primary sources that hold contrasting viewpoints and/or evidence. Prerequisite: PSY 101.

330 DRUGS AND BEHAVIOR (3) A comprehensive overview of drug use and abuse by individuals in American society. Major variables, pharmacological, physiological and social, are articulated through a behavioral model to provide the student with a framework for understanding drug consumption. Prerequisite: PSY 101.

331 PSYCHOLOGY OF CONSCIOUSNESS (3) Review of the psychology of consciousness with emphasis upon research and applications. Topics include brain mechanisms of consciousness and altered states, meditation, hypnosis, biofeedback, and drug-induced states. Prerequisites: PSY 101 or equivalent and at least junior standing. 2 Lect., 1 Recit.

332 PSYCHOLOGY OF STRESS MANAGEMENT (2) The course provides an overview of stress and stress-related dysfunction. Techniques for prevention of stress are emphasized through demonstration and student participation. Prerequisites: PSY 101 or equivalent and at least junior standing or permission of instructor. 1 Lect., 1 Recit.

350 EXPERIMENTAL I: LEARNING (3) Human and animal learning with special emphasis on experimental evidence and techniques. Discussion of the situational and physiological determiners of behavior, theories of motivation and emotion, and laboratory work involving techniques and problems in the study of motivation. Lecture and laboratory work. Can be taken concurrently with PSY 350L, Laboratory Research in Psychology for 1 additional credit hour. Prerequisite: PSY 250 or by permission of instructor.

351 EXPERIMENTAL II: PERCEPTUAL PROCESSES (3) Basic phenomena of the senses, their physiological correlates and integration in complex perceptual judgments. Lecture and laboratory work. Can be taken concurrently with PSY 351L, Laboratory Research in Psychology for 1 additional credit hour. Prerequisite: PSY 250 or by permission of instructor.

410 INDUSTRIAL AND CONSUMER PSYCHOLOGY (3) Problems and procedures in industrial psychology. Emphasis on motivational effects of such programs as incentive plans, worker adjustment, group participation, job security, training and supervision. Also the applications of psychology in personnel work. Includes selections,

interviewing, training, and counseling of employees, job analysis, attitude surveys and rating methods. The major factors involved in consumer psychology. Prerequisite: PSY 101. 2 Lect., 1 Recit., 1 Lab.

430 **THEORIES OF PERSONALITY** (3) Consideration of the major personality theories, with emphasis on Freudian and neo-psychoanalytic personality theory. Theorists such as Jung, existentialists, personality theories and the proponents of a trait approach to personality will be discussed. Papers and discussion will concentrate on clarifying and evaluating the merits of different theories. Prerequisite: PSY 101. 2 Lect., 1 Recit.

460 **PHYSIOLOGICAL PSYCHOLOGY** (3) Physiological aspects of behavior with special emphasis upon neurological structure and function. Experimental evidence on which theories of psychophysiology are based will be studied. Lecture and laboratory work. Can be taken concurrently with PSY 460L, Laboratory Research in Psychology for 1 additional credit hour. Prerequisite: PSY 250 or by permission of instructor.

461 **EXPERIMENTAL SOCIAL PSYCHOLOGY** (4) Critical examination of research designs and methods for the study of problems in social psychology. Experimental projects with questionnaires, scales, interviews and observation methods, and with problems of sampling and data analysis. Prerequisites: PSY 101 and/or permission of instructor. 1 Lect., 1 Recit., 3 Lab.

462 **BEHAVIOR MODIFICATION** (3) An introduction to a variety of techniques for altering behavior based on learning principles and laboratory findings. A review of relevant literature will be supplemented by laboratory assignments comprising field studies, behavior mapping and behavioral manipulations. The field studies will require data recording analysis and interpretation. Can be taken concurrently with PSY 462L, Laboratory Research in Psychology for 1 additional credit hour. Prerequisite: PSY 101.

490 **SENIOR SEMINAR** (3) Psychology majors are presented the formal opportunity to explore professional functions of psychologists and human service workers in related roles as well as various areas of current interest in applied psychology. Prerequisites: Senior standing as a Psychology major and permission of the instructor. 1 Lect., 2 Recit.

495 **PRE-PROFESSIONAL EXPERIENCE** (6-15) The Pre-Professional Experience in Applied Psychology in varied settings is designed to provide practical experience and beginning skills to selected students majoring in Psychology or Human Relations. The experiences will focus on beginning clinical skills, community services and research work in settings appropriate to the students' interests, and professional orientation such as child guidance settings, mental hospitals, probation offices and industrial or governmental agencies under the supervision of qualified staff. This will relate student theoretical learning to practical application. As a prerequisite the student needs the consent of the Department Chairperson. Consent will be contingent on the recommendations of the Department Pre-Professional Committee. Details of application procedure, criteria for qualification, and obligations of the experience can be obtained from the Department Office.

496 **RESEARCH APPRENTICESHIP** (6-15) The Research Apprenticeship is designed to provide the student with intensive experiences in empirical research under close supervision. Qualified students will become involved in ongoing research projects, working along with experienced researchers. Students will be encouraged to serve their apprenticeship at other campuses or institutional settings.

497 **INDEPENDENT STUDY** (See page 32 for course description.)

---L **LABORATORY RESEARCH IN PSYCHOLOGY** (1) To provide students with a working knowledge of research methodology and skills in a variety of areas of psychological investigations. Students will design and conduct research under instructor supervision. Can be taken concurrently with PSY 320, 350, 351, 460, and 462. Prerequisites: PSY 250, or equivalent and prior or concurrent course in experimental psychology.

PUBLIC SCHOOL NURSING (PSN)

206 PUBLIC SCHOOL ORGANIZATION (2) The course provides for nurses a working knowledge of the organization, administration and functioning of the American Public School System. It includes specific studies of pupil personnel, administration, non-instructional staff, auxiliary services, the educational program.

300 PUBLIC SCHOOL NURSING (3) The course deals with special training in public school nursing as a branch of public health nursing, including historical background, the various related fields, the problems and limitations involved. Responsibilities of the school nurse and her relationship to school administrators, staff, community and others are studied. New techniques of handling children with heart disease, communicable diseases, sight and hearing problems, accident prevention, etc. are included.

301 PUBLIC HEALTH NURSING I (3) This course is a continuation of Public School Nursing. Generalized versus specialized public health nursing service is carefully analyzed. Time is spent helping each nurse learn the need for and the proper method of conducting demonstrations and inservice educational programs needed in public health work.

302 PUBLIC HEALTH NURSING II (3) This course is a continuation of Public Health Nursing I. Generalized versus specialized public health nursing service is carefully analyzed. Time is spent helping each nurse learn the need for and the proper method of conducting demonstrations and inservice educational programs needed in public health work.

304 FAMILY CASE WORK (3) The course involves a study of the processes of interviewing and making case studies of family groups. The history and sociology of the American family is used as a background for study. Lectures, reports and seminar techniques are employed.

305 PREVENTION AND CONTROL OF COMMUNICABLE DISEASES (3) The course is designed to help the school nurse gain a more comprehensive understanding of those communicable diseases which are creating current health problems in our communities. Included is a study of many communicable diseases not of local origin that might create problems in our country because of extensive travel by United States citizens.

306 FIELD SERVICE SEMINAR (3) This course is designed to give the student a chance to visit schools, agencies and industries that employ nurses and deal with health on a community rather than an individual level. This allows the student to observe the various functions of these agencies and to discover how the public health nurse participates in agency and community planning.

307 METHODS AND MATERIALS OF HEALTH NURSING (INCLUDING AUDIO-VISUAL EDUCATION) (3) A course designed to bring into focus for the school nurse a relationship of health services available to the school child in the school, com-

munity, state and nation. Legal aspects of the school nursing situation are studied. Audio-visual education materials and techniques are stressed in light of the educational role of the school nurse.

309 PSN/BIO **EPIDERMIOLOGY** (3) The study of distribution and determinants of disease and injury in populations. This provides an introduction into community health and medical problems and services. Problem solving, case-control studies, and statistical analysis is emphasized. 2 Lect., 1 Rec.

497 **INDEPENDENT STUDY** (See page 32 for course description.)

REGIONAL PLANNING (REG)

102 **INTRODUCTION TO REGIONAL PLANNING** (3) An introduction to the use of Regional Planning as a tool for shaping the future man-made and natural environment. Students are introduced to man/land relationships that affect community well being, the tools used by government in managing these relationships for public benefit, and programs, politics, and activities required in recent planning legislation.

342 **LAND-USE POLICY** (3) An interpretive synthesis of the precepts and concepts of land-use that encourage and discourage geographic patterns on a changing landscape. Familiarizes the student with the economic, social, and political processes that are especially important for planning which is intended to move regions toward a particular goal, i.e., optimum use of finite, conservable, primary resource. Consideration is also given to individual perceptual behavior as it affects regional development.

352 **RECREATION LAND-USE PLANNING** (3) An inquiry into the meaning, types, and demands of man's recreational activities. Planning emphasis will be given to the definition of problems and purposes and to the consideration of alternative resources for recreation, both physical and cultural. Students will be made aware of the complex economic, social, political, and esthetic systems that are especially important to optimum leisure-time activities with objectives that strive to improve the quality of life. Some consideration will be given to the question of environmental perception and how it affects recreational development and individual behavior.

362 **TECHNIQUES OF GEOGRAPHIC MEASUREMENT** (3) An introduction to the many varied methods of geographic measurement such as aerial photograph interpretation, remote sensing, data-gathering techniques, and statistical-computerized analysis. The course is not intended to develop these skills but to familiarize the student with the more advanced methodologies of geographic field research.

430 **MODERN CARTOGRAPHIC TECHNIQUES** (1, 2 or 3) Advanced elements of map design and reproduction. Emphasis on contemporary media used in presenting quantitative data. The course is organized into 3 modules. The first, "Computer Mapping," should be particularly useful to students from the social and behavioral sciences, and has no prerequisites. The remaining two modules, "Thematic Maps" and "Practicum" require Geog. 230 as a prerequisite.

450 **SETTLEMENT SYSTEMS** (3) Analysis of the spatial aspects of human settlement problems, including race, sprawl, pollution, transportation, land-use, planning and rehabilitation. Principal focus on America's urban and rural settlements.

460 **TRANSPORT SYSTEMS** (3) Analysis of the spatial principles and networks of transport systems, including factors of route location, theories of interaction, and the role of transport in space-economy.

480 **TOPICAL SEMINARS IN REGIONAL PLANNING** (3) Seminars that consider the decision-making, problem-solving techniques of the planning process. Topical emphasis is given to systems analysis, political involvement, resource inventories and management, social organization, and changes in human behavior and attitudes. Seminars reflect inter-disciplinary and pluralistic nature of the planning process. May be taken for credit more than one time. Each seminar will be identified by topical emphasis.

494 **PLANNING INTERNSHIP** (12 semester hours, 1 academic term) The opportunity to apply knowledge and skills of planning. An experience in regional or corporate planning offices under the supervision of qualified planners. During this period, observation and conferences are scheduled by the student's advisor and evaluation is made of performance by the supervisory agency. The student is expected to complete at least two individually designed projects of research and field work approved by the advisor in addition to the applied planning practices of the cooperating agency.

496 **PLANNING SEMINAR** (3) Topical planning discussions of selected current problems, techniques, and research. Individual student research is directed into special fields of inquiry: 1) Coordination within a total national planning system. 2) Communication and education between planners and citizen groups. 3) Regulatory action at all levels of government. 4) Geographic research in variables that contribute to the problems of the cultural environment. 5) Alternates of specific land-use problems (e.g. land for solid waste disposal).

497 **INDEPENDENT STUDY** (See page 32 for course description.)

RESPIRATORY THERAPY (RPH, RTH)

RPH

101 **BIOLOGY OF HUMAN SYSTEMS I** (4) An integrated approach to the structure and function of the human organ system.

102 **BIOLOGY OF HUMAN SYSTEMS II** (4) Continuation of RPH 101.

201 **PATHOLOGY** (3) Reaction of the human body to physical, chemical, and microbial injury; especially designed for students in allied health programs. 2 Lect., 2 Lab.

204 **MICROBIOLOGY** (3) Elements of medical microbiology with emphasis on nonsocomial infections. 3 Lect., 2 Lab.

RHT

101 **RESPIRATORY THERAPY I** (4) An introduction to Respiratory Therapy. Oxygen and other gases used in Respiratory Therapy are studied and discussed. Methods of supplying and transporting gases are presented with emphasis on safety. Gas pressure and flow-regulating devices are presented in theory followed by student practice in the use of these devices. (Lectures plus field work)

102 **RESPIRATORY THERAPY II** (4) Introduction to the concept of humidity and various humidifying devices used for treatment of respiratory diseases. Aerosol therapy is presented first in theory and then in practice. Aerosol generators from jet capillary to ultrasonic devices are presented with the emphasis on application in treatment of patients. The student learns to operate environmental control devices. Methods

of oxygen analysis are presented and practiced. Prerequisite: Respiratory Therapy 101. (Lecture, laboratory, clinical application)

103 **RESPIRATORY THERAPY III** (4) Instruction in cardiopulmonary resuscitation and management of patient in such an emergency. The student learns to operate simple and complicated ventilators and their effect on patients. Methods of sterilization are taught and practiced. Prerequisite: Respiratory Therapy 102. (Lecture, laboratory, clinical practice)

104 **RESPIRATORY THERAPY IV** (4) Students spend time in the pulmonary function laboratory learning to perform lung spirometry. They interview patients and record information related to the disease process. Prerequisite: Respiratory Therapy 103. (Lectures plus field work)

201 **CLINICAL PRACTICUM** (8) During the Clinical Practicum, the student will be assigned to the Robert Packer Hospital Respiratory Therapy Department for clinical practice of the theory and procedures they have been taught in the didactic portion of the program. This will include observation of procedures, and unsupervised application after the student has proven competent in the clinical area. The student will be required to keep a written log of his/her experience during this time and submit a weekly report to the educational coordinator of the program. Prerequisite: Respiratory Therapy 102, or equivalent. (All day)

202 **PHYSIOLOGY OF RESPIRATION** (3) Regulation of oxygen consumption and carbon dioxide excretion by the central nervous system. Prerequisites: high school chemistry and algebra, or equivalent. 3 Lect., 3 Lab.

203 **CHEMISTRY OF GASES AND SOLUTIONS** A thorough examination of Henry's Law and its relation to gas transport by the circulatory system. 2 Lect., 2 Lab.

204 **PHARMACOLOGY** (3) Survey of pharmacological agents used in diagnosis and treatment of respiratory illness.

SECONDARY EDUCATION (ED)

100 **SCHOOLS AND SOCIETY** (3) A basic resource for understanding the critical problems facing public policy in education as well as gaining reliable knowledge about the educational past.

111 **SEPEP I (SECONDARY EDUCATION PROFESSIONAL EXPERIENCE PROGRAM)** (1)

211 **SEPEP II** (1)

311 **SEPEP III** (1)

411 **SEPEP IV** (1) A modularized course composed of experimental activities with emphasis placed on current educational theories and practices. Each student will be required to complete observation and participation experiences in educational settings.

201 **PERSONAL CAREER DEVELOPMENT** (2) This course is designed as an overview of the world of work relevant to western society. Current theories of vocational development are explored and the student's own vocational development is investigated. Laboratory work involves the collecting, evaluating, classifying, and dispensing of occupational, educational and social information.

300 **SECONDARY SCHOOL METHODS** (3) Principles, materials, and methods of teaching English, speech, languages, mathematics, sciences, or social science in the secondary school; assignment to section according to subject matter. Students

should consult their advisor concerning the spring or fall offering of this course. 2 Lect., 2 Lab.

301 EVALUATIVE TECHNIQUES (2) Elementary statistics, principles of test construction, selection and administration of standardized tests; emphasis on interpreting and reporting test scores; consideration of means of evaluation other than traditional paper and pencil tests.

302 AUDIO-VISUAL COMMUNICATION (2) Classroom communication theory is analyzed with an emphasis on the selection, utilization, and evaluation of educational media for instruction and presentations. Operation of instructional materials is included with special attention given to practical classroom applications. 1 Lect., 2 Lab.

305 READING IN THE CONTENT AREA (3) An investigation of the reading process as it applies to teaching students to read Social Studies, English, Math, and Health textbooks in grades 1 through 12.

306 TUTORING IN THE EDUCATIONAL SYSTEM (3) Provides training in tutoring techniques for various subjects. Provides information in training, utilizing, and evaluating tutors in elementary and secondary classrooms. Student participants in supervised tutoring sessions with college students. 2 Lect., 2 Rec.

400 STUDENT TEACHING (BY ARRANGEMENT) (12) An opportunity to apply the knowledge and skills acquired in professional preparation. This is accomplished by a field experience in College-established centers under the supervision of well-qualified cooperating teachers. During this period, observations and conferences are scheduled by the College supervisor who regularly visits the student during his off-campus experience. Required course for all Secondary Education majors.

401 HISTORY AND PHILOSOPHY OF EDUCATION (3) A foundations course in the study of professional education. Introducing the student to the social, historical, and philosophical foundations of education and the relationship that exists between the school and the society it serves.

402 CONTEMPORARY ISSUES IN EDUCATION (2) Students become more aware of current educational theories and practices. Through Ed 402 special programs are scheduled to orient class participants to current issues in education. 2 Lect., 1 Rec.

420 BASIC PHOTOGRAPHY (3) A thorough introduction to the basic tools and creative techniques of black and white photography. Topics include: Operation and use of the 35 mm camera and lens, exposure, film processing, print making, composition and design, and developing visual sensitivity. 2 Lect., 1 Lab.

421 TELEVISION PRODUCTION (3) This course covers the fundamentals and principles involved in the production of television programs. This includes the operation of TV equipment, production of visuals to be used in TV and the actual production of a program. 2 Lect., 1 Lab.

422 BASIC MOTION PICTURE PHOTOGRAPHY (3) The course will examine the process of planning and production of 8 mm and 16 mm films as based on effective principles of cinematography. Students will plan the content for their films, select the treatment, film the subject using satisfactory techniques, edit the film, add sound, and demonstrate the use of their film for individual, small or large group, or television viewing. Prerequisite: Ed 420 or Ed 421 or permission of the instructor. 2 Lect., 2 Lab.

497 INDEPENDENT STUDY (1-3) (See page 32 for course description.)

ID 285 MODULE A: MAINSTREAMING (1) (See page 150 for course description.)

ID 285 **MODULE B: READING** (1) (See page 151 for course description.)

ID 285 **MODULE C: GIFTED CHILDREN** (1) (See page 151 for course description.)

SOCIAL WORK (SWK)

101 **HUMAN SERVICES** (3) Survey of the field of human services. Introduction to the various professional roles, delivery systems and agencies. Emergent issues, needs, and trends affecting both public and private sectors will be reviewed. Supplementary field trips to representative human service organizations are involved.

241 **INTRODUCTION TO SOCIAL WORK** (3) Analysis of welfare activities as a social movement and of the dominant characteristics of the social welfare institution in America. Attention will be given to changing ideologies and to the professionalization of social work practice. Prerequisite: SOC 111; SOC 121 desirable.

449 **SOCIAL WORK TECHNIQUES: CASE WORK** (3) Theory and principles of social case work with individuals and families. The various roles and case work delivery systems are examined. Special emphasis on developing interviewing skills is made. Prerequisite: SWK 241; SOC 121 desirable.

450 **SOCIAL WORK TECHNIQUES: GROUP WORK** (3) Introduction to social group work techniques. The variety of groups and the appropriateness of various delivery systems will be studied. Direct experience in group processes is part of the course. Prerequisite: SWK 241; SOC 121 desirable.

451 **SOCIAL PLANNING AND DIRECTED CHANGE** (3) Selected cases of deliberate attempts at changing community practices are systematically examined. General patterns and recurrent problems involved in societal planning are examined. Prerequisites: Senior standing and consent of instructor.

452 **COMMUNITY ORGANIZATION** (3) Introduction to basic concepts and issues in Community Organization. Major emphasis is on the practical application of social change methods for social workers concerned with organizations at the grass-roots, agency and community levels for the delivery of more effective human services. Prerequisites: SWK 241 and 451; SOC 302 desirable.

453 **SENIOR SEMINAR** (3) The course is designed to prepare the graduating social worker to participate actively in the Process of Supervision used by professional social workers. Students are expected to be actively engaged in a helping relationship during the semester.

454 **EMPLOYMENT COUNSELING** (3) Introduction to the field of employment services. Techniques involved in assessing individual skills and job requirements as well as sources of manpower information and forecasting will be covered. Theories of job selection and career development are treated. Attention is given to the special problems of individuals undergoing retraining or rehabilitation, physically handicapped, and those having limited skills potential.

SOCIOLOGY (SOC)

111 **SOCIOLOGICAL PERSPECTIVES** (3) Introduction to the basic concepts, premises, and techniques involved in the scientific approach to the study of human societies. Analysis is made of selected aspects of social behavior at interpersonal, intergroup and societal levels of contemporary American Society.

121 CONTEMPORARY SOCIAL PROBLEMS (3) Survey of critical social problems confronting American society today. Their salient characteristics and the factors related to their creation and maintenance are explicated. ANTH 101 or SOC 111 desirable but not required.

203 ORGANIZATIONAL BEHAVIOR (3) Social dimensions of work organizations including formal and informal interaction patterns as well as belief and symbol systems. Case studies of human problems in industry and field observation of selected work situations are involved. Prerequisite: ANTH 101 or SOC 111.

222 SOCIOLOGICAL ASPECTS OF AGING (3) A description and analysis of the sociological factors affecting the elderly and the aging process. Particular focus is placed upon the conditions of the elderly as a function of societal norms, attitudes, and values.

232 AMERICAN FAMILY SYSTEMS (3) A study of the family throughout the life cycle including a brief historical overview of the family; emphasizes the life styles of contemporary families, influences of values in society upon family life and issues affecting individuals and families in their relationships. Prerequisite: SOC 111.

302 COMMUNITY (3) Examination of various types of communities as social systems. Special attention is given to attitude and opinion surveys and evaluation research problems. Prerequisite: SOC 111; previous training in statistics strongly recommended.

303 SOCIAL RESEARCH METHODS (3) Introduction to the logic and techniques of the social research process. Special attention is given to attitude and opinion surveys and evaluation research problems. Prerequisite: SOC 111; previous training in statistics strongly recommended.

304 PUBLIC OPINION (3) Analysis of the role of public opinion in the political system. The process by which political opinions are formed, communicated and influence political behavior. The design and administration of a survey to measure political opinions. (PSCI 304) Prerequisite: SOC 111. 1 Lect., 2 Rec.

305 SOCIOLOGY OF RELIGION (3) Analysis of the interrelationships between religion and other aspects of society particularly with reference to the problems of order and change. Consideration is given to the humanitarian ethic in American Society. Prerequisite: SOC 111; ANTH 101 desirable.

306 INTERRACIAL SEMINAR (3) Examination of personal and institutional aspects of interracial relationships. Emphasis is placed upon participative exploration through the use of controlled observations, simulations, role playing and similar techniques.

351 POPULATION ECOLOGY (3) Studies the spatial aspects of world population numbers, densities, and qualities, emphasizing the economic and social characteristics and mobility of the world's population. (GEOG 351) Prerequisite: SOC 111.

415 AMERICAN VALUES IN CONFLICT (3) Review of the conflicting values of different social and ethnic groups, generation, and sexual orientations and their consequences for American society. The nature of values, the basic American value system, and the relationship of individual and community value positions are examined. Attention is given to the application of techniques for value study to the clarification of educational and community problems.

430 DEVIANCE: DELINQUENCY AND CRIME (3) Exploration of community and social bases of juvenile delinquency and crime. Provides an introduction to sociological theories of deviance and the new perspectives in criminology. Prerequisite: 6 hours in Sociology or instructor's permission.

460 **SOCIOLOGY OF HEALTH AND MEDICINE** (3) Review of research and social issues bearing on health and medical practice in American society. Aspects covered include cross-cultural and social class comparisons; sick roles; professionalization process; hospital organization; ideological issues and public opinion.

SOCIOLOGY/ANTHROPOLOGY (SA)

321 **FUTURISTIC SOCIETY** (3) Investigation of the expanding impact of scientific technological changes for the future forms of social life. The potential for reorganization of social practices, alterations in values and belief systems, and for the creation of new social problems are considered. Prerequisites: SOC 121 and ANTH 101 are desirable.

340 **DOCUMENTARY PHOTOGRAPHY** (3) Exploring social relations with the camera. The use of photographs as tools of inquiry, documentation, and as data for social analysis. Problems related to cultural features affecting visual perception and reportage are treated. 2 Lect., 2 Lab.

350 **SELECTED TOPICS SEMINAR** (1-6) Review of a specialty area in Anthropology or Sociology or the study of a problem from an interdisciplinary position. Course may be repeated when topic is different. Prerequisites: Upper division standing and consent of instructor.

412 **RURAL COMMUNITY** (3) Intensive examination of a selected rural community. Instruction is focused on discerning patterns in social behavior and on imparting an understanding of the structure of rural life including its dominant cultural features. Prerequisites: 6 hours in Sociology and Anthropology and/or consent of instructor; SOC 302 desirable. 2 Lect., 2 Lab.

421 **URBAN SOCIETY** (3) Intensive study of the social structure of urban communities. Dominant institutional features and problems of social integration and change receive primary attention. Prerequisites: 6 hours in Sociology or Anthropology and/or consent of instructor; SOC 302 desirable.

441 **ORGANIZATIONAL INTERNSHIP** (6-15) Supervised and evaluated participation in the regular activities of a business, government agency, or social service organization. In consultation with field instructor the student is expected to prepare an analysis of the organization's role system and its real or potential area of stress. Prerequisite: Consent of instructor. SOC 203 strongly recommended.

497 **INDEPENDENT STUDY** (1-3) (See page 32 for course description.)

SPANISH (SP)

101 **INTRODUCTORY SPANISH I** (3) For students who have not previously studied Spanish. Fundamentals of grammar, intensive drill in pronunciation, comprehension and speaking. Two hours a week are required in the language lab. 3 Lect., 2 Lab.

102 **INTRODUCTORY SPANISH II** (3) Continuation of Spanish 101. Prerequisite: Span. 101 or its equivalent. Two hours a week are required in the language lab.

201 **INTERMEDIATE SPANISH I** (3) Intensive grammar review. Practice in comprehension and in the use of the written and spoken language. Prerequisite: Span. 102 or its equivalent. Two hours a week are required in the language lab. 3 Lect., 2 Lab.

202 INTERMEDIATE SPANISH II (3) Continuation of Span. 201. Prerequisite: Span. 201 or its equivalent. Two hours a week are required in the language lab. 3 Lect., 2 Lab.

205 PRONUNCIATION AND PHONETICS, SPANISH (1) An analysis of Spanish phonetics with emphasis on oral drill for English-speakers seeking to acquire an authentic Spanish accent. Prerequisite: Span. 102. 1 Lect., 1 Lab.

210 SPANISH CONVERSATION (3) Training in oral self expression. Selected topics are assigned for each class with the purpose of encouraging students to express themselves in Spanish. May be taken concurrently with Spanish 202 with consent of instructor. (Either Span. 210 or 305 are required of all majors.) 3 Lect., 2 Lab.

211 SELECTED READINGS (3) Reading comprehension through contemporary fiction and cultural material, adapted to the student in his 4th semester of Spanish. Readings are assigned and discussed in class with emphasis on vocabulary idioms and literary style. Prerequisites: Span. 201-202, or its equivalent. May be taken concurrently with Span. 202 with consent of instructor.

300L ED THE TEACHING OF SPANISH, SECONDARY METHODS — SPANISH (3) A study of the teaching of Spanish with an emphasis on the problems, methods and materials associated with language teaching. Prerequisite: Junior standing. Required of all Spanish majors in teaching education programs.

305 ADVANCED SPANISH CONVERSATION (3) A more intensive study of idiomatic Spanish and its application to current happenings. The class is conducted entirely in Spanish. May be taken concurrently with Span. 202 with consent of instructor. 3 Lect., 2 Lab.

306 THE CULTURE AND CIVILIZATION OF SPAIN (3) History of the customs and institutions of Spain as considered by historians and men of letters. Emphasis will be given to the effect of history on general culture and customs of present-day Spain. Prerequisite: Span. 202 or equivalent.

307 THE CULTURE AND CIVILIZATION OF LATIN AMERICA (3) A study of the history, customs and politics of Latin America. Although the study involves the history and customs of several countries, emphasis is given to general characteristics; race, religion, life style, etc. Prerequisite: Span. 202 or equivalent. Note: A Spanish major may satisfy the requirements with either Span. 306 or Span. 307, depending on the area of greater interest.

320 ADVANCED SPANISH STRUCTURE (3) Study and practical application of the structural patterns of Spanish; emphasis on syntax. Prerequisite: Completion of Span. 202 or its equivalent.

330 SURVEY OF SPANISH LITERATURE I (3) Reading and examination of principal writers of Spain, with attention given to literature movements, historical backgrounds, style and form. Outside reading in Spanish assigned. Prerequisite: Span. 202 or equivalent.

331 SURVEY OF SPANISH LITERATURE II (3) Continuation of Span. 330.

340 SPANISH-AMERICAN LITERATURE I (3) A study of major Spanish-American writers and literary movements, supplementary reading and reports in Spanish.

341 SPANISH-AMERICAN LITERATURE II (3) Continuation of Span. 340.

350 SPANISH LITERATURE IN TRANSLATION (3) Reading and discussion of the works of major Spanish and Latin American writers in English. Period and writer will depend on student interest and availability of texts in translation. Credit will be given toward a major or minor in Spanish with the permission of chairman. Available to all students.

370-380 **FOREIGN STUDY** (credit arranged) Foreign study is open to students who wish to continue the study of Spanish abroad. Plans for foreign study should be presented at least two semesters prior to departure and should be approved by the department chairman. Number of credits granted will be based upon validated credentials presented to the department. The student should register for Spanish 370-380 prior to departure. Regular periodic reports must be made during the student's residence abroad.

400 **SENIOR SEMINAR** (credit arranged) Selected topics in Spanish and Latin American literature. Open to qualified students with senior standing or juniors by permission of instructor and advisor. May be repeated for credit.

SUGGESTED TOPICS
Contemporary Latin American Fiction 1900-1950
Contemporary Latin American Fiction since 1950
Novels of the Mexican Revolution
Literature of the Exiles of the Spanish Civil War
Hispanic Women Writers
The Spanish Medieval Epic

497 **INDEPENDENT STUDY** (See page 32 for course description.)

SPECIAL EDUCATION (SP ED)

101 **PRE-PROFESSIONAL EXPERIENCE** (2) Special Education orientation, observation, seminar experience required of all new students prior to declaring a major in Special Education. Includes overview of the field, introduction to the handicapped through planned experiences, discussion of career requirements, field trips and observations, specialists as guest speakers, advisement seminars.

101 **INTRODUCTION TO EXCEPTIONAL CHILDREN** (3) Nature and needs of children who are exceptional in emotional, social, physical and intellectual development, including gifted. Career opportunities in special education, rehabilitation and related areas. Observation in special education settings. Prerequisite: PSY. 101.

201 **MENTALLY AND PHYSICALLY HANDICAPPED** (3) The study of etiology, characteristics, education and management of children and adults with mental and physical handicaps. The study would be an in-depth treatment following their introduction in SpEd 101. Some examples of mental handicaps would be mental retardation, social and emotional disturbance, and learning disabilities. Physical handicaps would include such disorders as visual and hearing impairments, epilepsy, and cerebral palsy. Prerequisite: SpEd 101.

301 **CURRICULUM ADJUSTMENTS FOR EXCEPTIONAL CHILDREN** (3) Study of philosophy, curriculum adjustments, methods and materials in special education. Considers goals, school organization, grouping, planning, unit instruction, teaching-learning process, evaluating pupil progress and parent and other agency relationships. Prerequisite: SpEd 201.

302 **DIAGNOSTIC AND CORRECTIVE TEACHING** (3) Study and directed application of selected achievement and other special tests and procedures useful for diagnostic and corrective teaching of children with learning disabilities. Development of teaching procedures adjusted to individual needs or weaknesses. Prerequisite: SpEd 201.

303 **OBSERVATION AND PARTICIPATION** (3) Observation and participation in special education settings with seminar class discussions and conference with instructor.

Considers teaching-learning process selecting, organizing, and presenting curriculum materials at different grade levels. Case study project. Prerequisites: SpEd 301, PSY. 230.

304 **PRACTICAL ARTS FOR EXCEPTIONAL CHILDREN** (3) Designed to acquaint the special education teacher with elementary task analysis and skill sequences in practical arts areas, with emphasis on foods, sewing, and related homemaking skills. Aids the prospective teacher of the handicapped in utilizing equipment now becoming available in special class settings. Prerequisite: Instructor's permission.

310 **COMMUNICATION DISORDERS** (3) Introduction to the field of speech pathology and audiology with orientation toward the classroom teacher. Development of understanding of the nature of specific speech, hearing, and language disorders, recognition of these disorders and basic principles of speech correction. Students are introduced to methods of speech training appropriate for classroom teachers. Prerequisite: SpEd 101.

320 **THE MENTALLY GIFTED** (3) Physical, mental, emotional and social characteristics of mentally gifted children and youth. Consideration of teaching procedures, types or organization and curriculum materials for their education. Explore creative activities, guidance, evaluation of programs, and research findings. Prerequisite: SpEd 101.

321 **METHODS FOR THE GIFTED** (3) Study of curriculum, methods, materials, and resources in the education of the gifted and talented. Includes analysis and demonstration of leading materials and strategies that have been used successfully in classes for the gifted. Case studies, field visits, and teaching simulations are provided. Prerequisite: SpEd 320 or permission of instructor.

330 **DISADVANTAGED CHILDREN AND YOUTH** (3) Introductory study of definitions, causes, characteristics and education of children and youth from disadvantaged environments. Consideration of problems in social-psychological context with implications for programs of improvement and research findings. Prerequisite: PSY. 101.

340 **EDUCATION OF THE EMOTIONALLY DISTURBED** (3) Survey of behavior disorders in children and youth. Considers emotional disturbance, social conflict, perceptual difficulties, hyperactivity, and related problems. Coverage includes appropriate educational strategies and instructional materials for problem children. Observation and child study experiences included. Prerequisites: SpEd 101, PSY. 230.

341 **PSYCHO-EDUCATIONAL PROCESSES FOR BEHAVIOR DISORDERS** (3) Extension of survey course (SpEd 340) on behavior disorders in children and youth. Intensive coverage of methods, materials, and research appropriate in the re-education of those with behavior disorders at the preschool, elementary and secondary levels. Includes minipracticum experience designed on individual basis by instructor. Prerequisite: SpEd 340.

345 **BEHAVIOR MODIFICATION WITH EXCEPTIONAL CHILDREN** (3) Study of implications of the principles of behavior theory for classroom teaching techniques, particularly with exceptional children. General and specific methods for generating, strengthening, and maintaining desirable behavior, and methods for weakening undesirable behavior will be stressed. The conditioning of both academic skills and non-academic behaviors on an individual and group basis will be stressed. Direct experience in modifying the behavior of exceptional children will be arranged. Prerequisites: SpEd 201, PSY. 230.

355 **SELECTED TOPICS** (3) Designed for field experience or project work on selected current problems and interest areas in the field of Special Education. Covers Early

Childhood Handicap, Elementary and Secondary Special Education, Low Functioning Retarded, Mentally Gifted, Emotionally Disturbed, and Learning Disabled. Students work individually with the instructor and periodically report back to the class on projects. Prerequisite: Instructor's permission.

360 **EXCEPTIONAL CHILDREN IN REGULAR CLASSES** (3) Designed to develop an understanding of the rationale and procedures for mainstreaming exceptional children. Legal and philosophical rationales are examined and current developments in mainstreaming discussed. Major mainstreaming models will be studied and problems and issues covered. Prerequisite: PSY 230.

375 **RESIDENTIAL FACILITIES FOR THE HANDICAPPED** (3) (Every Other Summer) The course will explore the many types of residential facilities used to house the handicapped. The exploration will include regulations, policies, and standards applied to those facilities. The Normalization Principles will be studied and these principles will be applied to the facilities. Residential facilities will include institutions, interim care, group homes, cluster apartments, and semi-independent apartments.

400 **STUDENT TEACHING IN SPECIAL EDUCATION** (12) Practice teaching under supervision of master teachers. Placement will be in two different special classes as assigned by the Department of Special Education. Required of all students working for a degree in teacher education.

401 **TEACHING ELEMENTARY SPECIAL EDUCATION** (3) Concerned with organizational procedures, curriculum practices and techniques used in educating exceptional children in elementary schools. Emphasis on primary and intermediate programs. Prerequisite: SpEd 303.

402 **TEACHING SECONDARY SPECIAL EDUCATION** (3) Study of organizational procedures, curriculum practices and methods and techniques used in educating the exceptional children in junior and senior high schools. Emphasis on prevocational and work-study programs. Prerequisite: SpEd 303.

403 **TEACHING THE TRAINABLE RETARDED** (3) Organization of special classes and school programs for severely retarded children and youth. Diagnosis and classification; development of teaching materials and techniques; community organizations and parent education. Prerequisite: SpEd 303.

404 **EARLY CHILDHOOD HANDICAP** (3) Study of nature, needs, and implications of handicapped children in early childhood. Considers identification, differential diagnosis, consultative services, parent education and counseling, resources agencies, educational programs, curriculum, methods and materials. Emphasis on multidisciplinary planning and research findings. Observations and child study included. Prerequisite: SpEd 101, 303; or instructor's permission.

410 **PROFESSIONAL SEMINAR** (2) Considers general orientation and critiques concerned with classroom problems, study of school law, school organization and administration, and role of special education in this context.

450 **FIELD EXPERIENCE** (12) Supervised field experience in a professional setting serving the handicapped.

480-485 **SPECIAL EDUCATION WORKSHOPS** (1-6) Special workshop seminars designed to focus on contemporary trends, topics, and problems in the field of Special Education. Usually are specifically funded projects utilizing lectures, resource speakers, team teaching, field experience, practicum, news media, and related techniques.

490 **LEARNING DISABILITIES** (3) Considers learning needs and problems of children with special learning disabilities in listening, thinking, speaking, reading, writing,

spelling, and/or arithmetic. Discussion of definitions, etiology, diagnostic problems and research findings, emphasizing the multidisciplinary approach. Development and evaluation of remedial procedures and materials with practical application. Prerequisites: PSY. 230, ED. 301.

497 INDEPENDENT STUDY (1-3) (See page 32 for course description.)

ID 285 MODULE A: MAINSTREAMING (1) (See page 150 for course description.)

ID 285 MODULE B: READING (1-3) (See page 151 for course description.)

ID 285 MODULE C: GIFTED CHILDREN (1) (See page 151 for course description.)

ID 499 INTERDISCIPLINARY SEMINAR IN EARLY CHILDHOOD EDUCATION (2) (See page 151 for course description.)

SPEECH (SPC)

101 ORAL COMMUNICATION (3) This course is required of all Mansfield students. Its objectives are to help the student to formulate his own ideas coherently, evaluate factual material and use sound reasoning patterns in his preparation and attempts to communicate concepts orally; to determine and select the most effective means of expressing himself in formal and informal speaking situations, to recognize effective communication situations, and be able to indicate the variables contributing to successful communication. 1 Lect., 2 Recit.

200 ORAL INTERPRETATION (3) An introductory course into the methods and presentations of oral readings of various literary genres; written analysis and practical experience in presentation of selections will be included. The student should be able to understand and appreciate oral interpretation as the communication of the reader's impression of the author's intent in a piece of literature. Prerequisite: Speech 101 or consent. 1 Lect., 2 Recit.

201 INTRODUCTION TO MASS MEDIA (3) A course concerned with the application of modern mass media, its origin, history, theory, principles and philosophy to the areas of entertainment, instruction, and audience persuasion. Practical experience is provided in the basic media. 2 Lect., 1 Recit.

203 VOICE AND ARTICULATION (3) A study of the basic physiology of the speech mechanism, the processes of breathing, phonation, resonation, and articulation, phonetic analysis and transcription, and evaluations of the student's speech. Attention is given to the correction of individual faults in voice and articulation habits. Prerequisite: Speech 101 or consent. Recommended for all students.1 Lect., 2 Recit., 1 Lab.

204 PUBLIC SPEAKING (3) An advanced study of the construction, preparation and delivery of the basic types of speeches and their effect in public speaking situations. Prerequisite: Speech 101, or consent. 1 Lect., 2 Lab.

206 FORENSICS (1) Designed for the student interested in intercollegiate debating and forensics. The theory and practice of competitive speaking in debating, extemporaneous speaking, original oratory, interpretation and other forensic events. Spc. 206 may be repeated throughout the 8 semester sequence for 1 semester hour per semester. Prerequisite: Consent of instructor. 1 Lab.

207 ARGUMENTATION AND DEBATE (3) A study of theory, practice, history, principles, philosophy and uses of argumentation and debate situations. Prerequisite: Spc. 101 and consent of instructor. 1 Lect., 2 Recit.

210 **INTRODUCTION TO PUBLIC RELATIONS** (3) An introductory course in the basic principles of Public Relations. Students will study the history, principles, and practice of public relations in business, education, government, and other organizations.

300 ED **TEACHING SPEECH AND THEATRE IN THE SECONDARY SCHOOLS** (3) This course covers the objectives, status, and problems of speech education in the public schools; principles and methods of teaching Speech and Theatre units and courses; methods of developing a Speech and Theatre syllabus; the organization, direction, and presentation of the co-curricular Speech and Theatre activities. Prerequisites: junior standing and consent.

301 **TELEVISION PROGRAM DESIGN** (3) A study of the theoretical and practical aspect of television program conceptualization, scripting, production, presentation, and evaluation. Prerequisites: Spc. 201, Introduction to Mass Media and consent of instructor.

302 **RADIO PRODUCTION AND MANAGEMENT** (3) A study of the theoretical and practical aspects of radio production for a variety of station formats. The course also will study station management, sales, and advertising. Prerequisites: Spc. 201 and/or permission of instructor.

305 **DISCUSSION AND GROUP DYNAMICS** (3) The course includes: (1) a study of the principles, techniques, nature, and purposes of discussion; (2) an investigation of the use of discussion techniques in a democratic society for formal, informal, public, and private situations; (3) a study of the characteristics and techniques of leadership, how group members interact, the nature of group thought and action, group communication patterns and networks, techniques for improving group health; (4) practical experience in using group dynamics principles; (5) practice in using discussion techniques to investigate and solve problems.

307 **ADVANCED ORAL INTERPRETATION** (3) Advanced course in the analysis of prose, poetry and drama as it is performed orally. Prerequisites: Spc. 200 or consent of instructor. 1 Lect., 2 Recit.

308 **READERS THEATRE** (3) A study of the techniques involved in the organization and presentation of Readers Theatre and Chamber Theatre productions. Performance, direction, and selection of materials is stressed. Prerequisites: Spc. 200 or consent of instructor. 1 Lect., 2 Recit.

310 **PUBLIC RELATIONS WORKSHOP** (3) Practical study of Public Relations. Student will plan and direct a public relations program for an on-campus organization. Prerequisite: Spc. 210.

400 **COMMUNICATION THEORY** (3) This course is an investigation and study of the major concepts, principles, models, and theories of human communication. An introduction to General Systems Theory, General Semantics, role behavior, and the diffusion of innovation, the role of language in communication, linguistics, and the psychology of communication are included to provide a framework for an investigation of the process of communication on the intrapersonal, interpersonal, small group, one-to-many, and mass media levels.

401 **PERSUASION** (3) A study of the psychology of persuasion and its use in a free society. The use of propaganda and its effect on our daily living. To prepare the student to evaluate persuasive messages, to use persuasion effectively, and to appreciate the ethics of persuasion.

402 **WORKSHOP IN SPEECH COMMUNICATION AND THEATRE** (3) A special two or three week concentrated summer workshop course in current techniques related to general and specific communication situations through classroom experiences

provided by direct contact between experts in communications and workshop students. The course provides for innovative instructional procedures through team teaching and interdisciplinary approaches. 1 Lect., 2 Recit., 2 Lab.

403 CRITICAL SURVEY OF PUBLIC ADDRESS (3) An analysis of outstanding speeches focusing on rhetorical theory and its development. The student will be able to understand and appreciate the history of oratory, rhetorical criticism, and public address. 2 Lect., 1 Recit.

405 CREATIVITY IN THE RELATED ARTS (3) This course combines a philosophical approach to the creative process which dominates the related arts field with arts experiences using color, movement, sound, form and space. The student will develop an understanding of the creative process and of aesthetic principles in his environment.

450 SPECIAL PROJECTS IN SPEECH & THEATRE (1-3)

497 INDEPENDENT STUDY (See page 32 for course description.)

THEATRE (THTR)

110 INTRODUCTION TO THEATRE (3) A basic approach to theatre consists of a survey of drama and the art and craft of the theatre. This course does not necessarily include practice in applied theatre. Recommended for non-majors.

202 CREATIVE DRAMATICS (3) A study of the theories and techniques and use of creative dramatics with children and young adults. Techniques will be of value for the teacher in the school, for church and community groups with entertainment and social development included in these areas. Recommended for non-majors.

210 STAGECRAFT (3) An introduction to the principles, procedures and techniques of theatrical production; including backstage organization and planning, construction, painting, rigging, and operation of scenic elements, and the use and operation of lighting equipment. Laboratories connected with the department's major productions encourage the student both to develop skills in the techniques of the theatre, and to see the contribution of various elements to the entire production. 1 Lect., 3 Lab.

211 THEATRE PRODUCTION WORKSHOP (1-4) Practical experiences in theatre production techniques with emphasis in scenery construction, painting, costumes, stage properties, lighting, publicity, and shop safety practices required for all Theatre majors. Prerequisites: Theatre 210 and consent. Three hours in this course required of all Theatre majors.

212 FUNDAMENTALS OF ACTING I (3) A study of the basic techniques and methods of acting. This course is designed for the beginning actor and no previous acting experience is necessary. The course begins with a physical approach to the art of acting designed to help the actor concentrate on, define, and control his physical reality. A detailed unit on role analysis furnishes a point of synthesis for skills developed. 1 Lect., 3 Lab.

213 FUNDAMENTALS OF ACTING II (3) An extension of Theatre 212, Fundamentals of Acting. Emphasis on scene study, rehearsal and performance techniques. Prerequisites: ThTr 212 and consent.

214 MAKE-UP (1) Practical course designed to familiarize the student with the basic principles and techniques of stage make-up. The student will become aware of the various types of make-up and how to apply it in order to enhance a dramatic characterization. 1 Lect., 3 Lab.

215 **SURVEY OF THEATRE HISTORY I** (3) A study of development of the theatre from its primitive origins to the 19th century.

216 **SURVEY OF THEATRE HISTORY II** (3) A study of the development of the theatre from the 19th century to recent movements in the 20th century.

300 **ADVANCED ACTING** (3) An advanced course in the methods and presentations of acting styles, from the ancient Greeks to the modern theatre. Particular emphasis will be placed on performance. May be taken twice for credit. Prerequisites: ThTr 212, 213.

310 **FUNDAMENTALS OF DIRECTING** (3) A basic approach to the principles and procedures of directing a play. Practical application through student's directing of workshop scenes and a one-act play presented to a public audience. Prerequisites: ThTr 210, 212, 215, 216 and consent of instructor. 1 Lect., 1 Recit., 2 Lab.

311 **STAGE COSTUMING** (3) Study and practice in the design and execution of costumes for the stage. The idea of costume as an outward, visible extension of the human body and personality will carry through consideration of historical period, characterization, and various concepts of form and style. Prerequisite: Spc. 210 or consent of instructor. 2 Lect., 2 Lab.

312 **STAGE LIGHTING** (3) A study of the history and basic techniques of lighting for the stage. Lighting designs and control are stressed. The student participates in lighting major productions. Prerequisite: ThTr 210. 1 Lect., 3 Lab.

313 **SCENE DESIGN** (3) Study and practice in the principles and techniques of scenic design in the modern theatre: (a) vision and imagination of the creative artist, (b) ingenuity and skills of the scenic artist, (c) knowledge and sense of the theatre and the relationship of the contribution of the scenic designer with those of the actor, director, and playwright. Prerequisite: ThTr 210. 1 Lect., 1 Recit., 1 Lab.

410 **PLAY PRODUCTION** (3-18) A summer practicum in theatre. Students may enroll for six summer sessions of 3 semester hours each. A fundamental approach to the production aspects of dramatic art. Practical application of essential aspects of play production will be stressed through student involvement in actual summer theatre productions. This course is especially recommended for those who wish the experience of total involvement in the theatre production process.

414 **THE MUSICAL THEATRE** (3) A study of America's most unique contribution to world theatre. Special emphasis will be given to performance aspects of this art form. Prerequisite: sophomore standing or permission of instructor.

417 **PLAY STRUCTURE AND ANALYSIS** (3) A study of dramatic literature through analysis of selected plays and their significance in the development of the dramatic form. Each play will be studied for a realization of the social and cultural conditions in which the playwright lived and worked along with an investigation into his intent.

418 **PLAYWRITING** (3) A study of the principles and theories of dramatic structure along with practice in writing for the stage. Prerequisites: ThTr 215, 216, 310, 417 and/or consent of instructor.

X-RAY TECHNOLOGY (XRT)

101 **X-RAY TECHNOLOGY I** (4) To provide beginning students with an overall view of radiologic technology as well as to acquaint them with the ethical principles and responsibilities involved in becoming a member of the paramedical profession. Instruction is provided in radiographic positioning of the bones of the body with emphasis placed on the extremities and spine of the body. Subsequently, a forum

for the review, informal discussion, and seminars on the quality of films produced by the student is provided. Course includes lecture plus field work.

102 X-RAY TECHNOLOGY II (4) To develop the knowledge and skills necessary for thorough and efficient darkroom procedure and to give the students a thorough understanding of the theory of X-ray techniques. Instruction of the more difficult radiographic positions is provided, adding to the basic principles of Radiographic Positioning I. Emphasis is placed on the skull and organs of the chest, abdomen, and pelvis. A forum for review, informal discussion, and seminars on the quality of films produced by the students is provided. Prerequisite: X-ray Technology 101. Course includes lecture plus field work.

103 X-RAY TECHNOLOGY III (4) To acquaint students with the most difficult radiographic positioning procedures and to give them a thorough working knowledge of the complexities of radiographic exposure factors. Emphasis is placed on maximum safety procedures to protect both personnel and patients in the use of X-rays in detecting and identifying disease processes. Prerequisite: X-ray Technology 102. Course includes lecture plus field work.

104 X-RAY TECHNOLOGY IV (4) To acquaint students with the necessary physics, the fundamentals of radioisotope techniques and the role of the technologist in their use. The course is slanted toward the student whose training is primarily in the field of diagnostic X-ray technology, but whose subsequent employment may include duties in radiation therapy. Students are instructed in the changes that occur in disease and injury and their application to X-ray technology, permitting the technologists to handle seriously ill or injured patients more intelligently. Relative to the application of vital techniques is the instruction given to students in the maintenance of X-ray equipment, to permit detection and correction of simple difficulties. Students are given an insight into the organization, function, supervision, and financial arrangements relative to departments of radiology. Prerequisite: X-ray Technology 103. Course includes lecture plus field work.

201 CLINICAL PRACTICUM (4) To instruct students in the use of cones, diaphragms, collimators, filters, grids, screens, and film, and the effect each has on the quality of the radiograph. More specialized instruction is provided for situations involving the role of the radiologic technologist in nursing situations and in the care given to young children. Offered in summer sessions. Prerequisite: X-ray Technology 102.

203 X-RAY PHYSICS Properties of radiation from Roentgen tubes and radioactive isotopes and their use in medicine. Prerequisites: X-ray Technology 102, and high school algebra and geometry, or equivalents. 2 Lect., 2 Lab.

204 CLINICAL PRACTICE AND EVALUATION An evaluation of the X-ray students' clinical performance will be made during the final six months of their training. Registered staff technicians and radiologists, whom the students have been working with throughout the training period, will evaluate the students' practical application of the knowledge acquired didactically during the prior 18 months of training. This will include professional ethics and manner, radiographic positioning, technical processing, and nursing procedures. Each student will turn in a monthly record of procedures performed which will be evaluated by the director of the training program. Course includes lecture, laboratory and clinical practice.

Faculty

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